Cylindrical Roller Bearings

C&R cylindrical roller bearings have many designs, dimension series and sizes. The majority is single row bearings with a cage, single, double and multi row full complement bearings (without cage). Bearings with a cage can accommodate heavy radial loads and operate at high speeds. Full complement bearings are suitable for very heavy radial loads at moderate speeds. With high precision than P5 standard, they have high dimensions and running accuracy accordingly. They are normally used in where requests high running accuracy, such as spindle.

Features

The rollers of cylindrical roller bearings are key components. Their geometry, the so–called logarithmic profile, provides an optimum stress distribution in the contact zones in the bearing. Their surface finish maximizes lubricant film formation and optimizes rolling motion of the rollers. The benefits derived from this compared with traditional designs include enhanced operational reliability and a greater insensitivity to misalignment.

C&R cylindrical roller bearings consist of:

- Single row cylindrical roller bearings, caged, mainly of the NU, NJ, NUP and N designs
- Double row cylindrical roller bearings, caged, mainly of the NNU and NN designs.
- Single row full complement cylindrical roller bearings, mainly of the SL1818, SL1829, SL1830, SL1822, SL1923, ZSL1923 and ZSL1923 designs.
- Double row full complement cylindrical roller bearings, mainly of the SL1850, SL01, SL02, SL04···P, SL0450···P and SL06 design.
- Multi–Row full complement cylindrical roller bearings, mainly of the SL11, SL12, SL14, SL15

Material

Material	China	USA	Japan	Germany	Main used for
	GB	AISI	JIS	DIN、DINEN	
Bearing steel	GCr15	52100	SUJ2	100Cr6	All bearing types in this part

Remarks:
Exact material selected is due to primary equipment and condition where the equipment being used.
Any question, pls check and discuss with our technicians.

Dimensions:

The dimensions of the standard single row cylindrical roller bearings are in accordance with ISO 15–1998.

Tolerances:

C&R single row cylindrical roller bearings are manufactured with normal tolerances for dimensional accuracy and P6 tolerances for running accuracy as standard. The tolerances are in accordance with ISO 492:2002.

Radial internal clearance:

C&R single row cylindrical roller bearings are manufactured with normal radial internal clearance as standard and most of the bearings are also available with C3 radial internal clearance. Some of the bearings can even be supplied with the smaller C2 or the greater C4 clearance. In addition, some bearings are produced with special reduced clearances. This special clearance corresponds to a section of a standard clearance range or two adjacent clearance ranges.

Bearings with non–standard clearance or special reduced clearances can be supplied to special order.

The actual clearance limits for bearings with a cylindrical bore and a tapered bore are in accordance with ISO 5753:1991. They are valid for un–mounted bearings under zero measuring load.

The separable components of all bearings with standard clearance as well as those with reduced clearance are interchangeable.

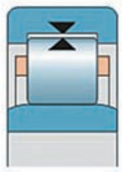
Axial internal clearance:

NUP–design cylindrical roller bearings, which can locate a shaft axially in both directions, are manufactured with an axial internal clearance as shown in table 3. The axial internal clearance of NJ–design bearings when combined with an HJ angle ring is specified in table 4.

The clearance limits quoted in tables 3 and 4 should be considered as guideline values. When axial internal clearance is measured, the rollers may tilt, causing an enlargement of the axial clearance, which may be as much as.

–	the radial internal clearance of bearings in the 2, 3 and 4 series or
–	2/3 of the radial internal clearance for bearings in the 22 and 23 series,

For example:



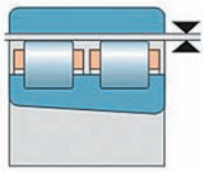


Table 1: Radial internal clearance of cylindrical roller bearings with cylindrical bore

Bore Diameter		Radial Internal clearance													
d		C1		SPC2		C2		Normal		C3		C4		C5	
over	incl.	min	max	min	max	min	max	min	max	min	max	min	max	min	max
mm		µ m													
–	24	–	–	–	–	0	25	20	45	35	60	50	75	65	90
24	30	5	15	10	25	0	25	20	45	35	60	50	75	70	95
30	40	5	15	12	25	5	30	25	50	45	70	60	85	80	105
40	50	5	18	15	30	5	35	30	60	50	80	70	100	95	125
50	65	5	20	15	35	10	40	40	70	60	90	80	110	110	140
65	80	10	25	20	40	10	45	40	75	65	100	90	125	130	165
80	100	10	30	25	45	15	50	50	85	75	110	105	140	155	190
100	120	10	30	25	50	15	55	50	90	85	125	125	165	180	220
120	140	10	35	30	60	15	60	60	105	100	145	145	190	200	245
140	160	10	35	35	65	20	70	70	120	115	165	165	215	225	275
160	180	10	40	35	75	25	75	75	125	120	170	170	220	250	300
180	200	15	45	40	80	35	90	90	145	140	195	195	250	275	330
200	225	15	50	45	90	45	105	105	165	160	220	220	280	305	365
225	250	15	50	50	100	45	110	110	175	170	235	235	300	330	395
250	280	20	55	55	110	55	125	125	195	190	260	260	330	370	440
280	315	20	60	60	120	55	130	130	205	200	275	275	350	410	485
315	355	20	65	65	135	65	145	145	225	225	305	305	385	455	535
355	400	25	75	75	150	100	190	190	280	280	370	370	460	510	600
400	450	25	85	85	170	110	210	210	310	310	410	410	510	565	665
450	500	25	95	95	190	110	220	220	330	330	440	440	550	625	735
500	560	25	105	105	210	120	240	240	360	360	480	480	600	690	810
560	630	25	115	115	230	140	260	260	380	380	500	500	620	780	900
630	710	30	130	130	260	145	285	285	425	425	565	565	705	865	1005
710	800	35	145	145	290	150	310	310	470	470	630	630	790	975	1135
800	900	40	160	160	320	180	350	350	520	520	690	690	860	1095	1265
900	1000	–	–	–	–	200	390	390	580	580	770	770	960	1215	1405
1000	1120	–	–	–	–	220	430	430	640	640	850	850	1060	1355	1565
1120	1250	–	–	–	–	230	470	470	710	710	950	950	1190	1510	1750
1250	1400	–	–	–	–	270	530	530	790	790	1050	1050	1310	1680	1940
1400	1600	–	–	–	–	330	610	610	890	890	1170	1170	1450	1920	2200
1600	1800	–	–	–	–	380	700	700	1020	1020	1340	1340	1660	2160	2480
1800	2000	–	–	–	–	400	760	760	1120	1120	1480	1480	1840	2390	2760

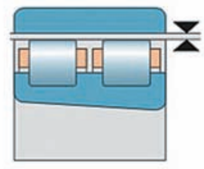


Table 2: Radial internal clearance of cylindrical roller bearings with tapered bore

Bore Diameter		Radial Internal clearance													
D		C1		SPC2		C2		Normal		C3		C4		C5	
over	incl.	min	max	min	max	min	max	min	max	min	max	min	max	min	max
mm		µm													
–	24	–	–	–	–	15	40	30	55	40	65	50	75	70	95
24	30	15	25	25	35	20	45	35	60	45	70	55	80	75	100
30	40	15	25	25	40	20	45	40	65	55	80	70	95	90	115
40	50	17	30	30	45	25	55	45	75	60	90	75	105	105	135
50	65	20	35	35	50	30	60	50	80	70	100	90	120	125	155
65	80	25	40	40	60	35	70	60	75	85	120	110	145	145	180
80	100	35	55	45	70	40	75	70	105	95	130	120	155	175	210
100	120	40	60	50	80	50	90	90	130	115	155	140	180	200	240
120	140	45	70	60	90	55	100	100	145	130	175	160	205	225	270
140	160	50	75	65	100	60	110	110	160	145	195	180	230	255	305
160	180	55	85	75	110	75	125	125	175	160	210	195	245	280	330
180	200	60	90	80	120	85	140	140	195	180	235	220	275	305	360
200	225	60	95	90	135	95	155	155	215	200	260	245	305	340	400
225	250	65	100	100	150	105	170	170	235	220	285	270	335	375	440
250	280	75	110	110	165	115	185	185	255	240	310	295	365	415	485
280	315	80	120	120	180	130	205	205	280	265	340	325	400	465	540
315	355	90	135	135	200	145	225	225	305	290	370	355	435	515	595
355	400	100	150	150	225	165	255	255	345	330	420	405	495	580	670
400	450	110	170	170	255	185	285	285	385	370	470	455	555	650	750
450	500	120	190	190	285	205	315	315	425	410	520	505	615	720	830
500	560	130	210	210	315	230	350	350	470	455	575	560	680	800	920
560	630	140	230	230	345	260	380	380	500	500	620	620	740	900	1020
630	710	160	260	260	390	295	435	435	575	565	705	695	835	1005	1145
710	800	180	290	290	435	325	485	485	645	630	790	775	935	1125	1285
800	900	200	320	320	480	370	540	540	710	700	870	860	1030	1265	1435
900	1000			355	540	410	600	600	790	780	970	960	1150		
1000	1120			395	600	455	665	665	875	865	1075	1065	1275		
1120	1250			440	670	490	730	730	970	960	1200	1200	1440		
1250	1400			490	740	550	810	810	1070	1070	1330	1330	1590		
1400	1600			560	840	640	920	920	1200	1200	1480	1480	1760		
1600	1800			630	950	700	1020	1020	1340	1340	1660	1660	1980		
1800	2000			700	1060	760	1120	1120	1480	1480	1840	1840	2200		

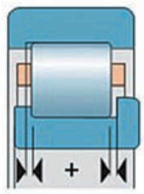


Table 3: Axial internal clearance of cylindrical roller bearings of NUP and NP designs

Bore Diameter	Bore size	Axial internal clearance of bearing of series									
d		2		3		4		22		23	
		min	max	min	max	min	max	min	max	min	max
mm		μ m									
15	02	–	–	–	–	–	–	–	–	–	–
17	03	37	140	37	140	–	–	37	140	47	155
20	04	37	140	37	140	–	–	47	155	47	155
25	05	37	140	47	155	–	–	47	155	47	155
30	06	37	140	47	155	55	155	47	155	47	155
35	07	47	155	47	155	55	155	47	155	62	180
40	08	47	155	47	155	55	155	47	155	62	180
45	09	47	155	47	155	55	155	47	155	62	180
50	10	47	155	47	155	70	185	47	155	62	180
55	11	47	155	62	180	70	185	47	155	62	180
60	12	47	155	62	180	70	185	62	180	87	230
65	13	47	155	62	180	70	185	62	180	87	230
70	14	47	155	62	180	70	185	62	180	87	230
75	15	47	155	62	180	70	185	62	180	87	230
80	16	47	155	62	180	70	185	62	180	87	230
85	17	62	180	62	180	95	230	62	180	87	230
90	18	62	180	62	180	95	230	62	180	87	230
95	19	62	180	62	180	95	230	62	180	87	230
100	20	62	180	87	230	–	–	87	230	120	315
105	21	62	180	–	–	–	–	–	–	–	–
110	22	62	180	87	230	–	–	87	230	120	315
120	24	62	180	87	230	–	–	87	230	120	315
130	26	42	180	87	230	–	–	87	230	120	315
140	28	62	180	87	230	–	–	87	230	120	315
150	30	62	180	87	230	–	–	87	230	120	315
160	32	87	230	87	230	–	–	120	315	–	–
170	34	87	230	–	–	–	–	120	315	–	–
180	36	87	230	–	–	–	–	120	315	–	–
190	38	87	230	–	–	–	–	120	315	–	–
200	40	87	230	–	–	–	–	120	315	–	–
220	44	95	230	–	–	–	–	120	315	150	365
240	48	95	250	–	–	–	–	–	–	–	–
260	52	95	250	–	–	–	–	–	–	–	–

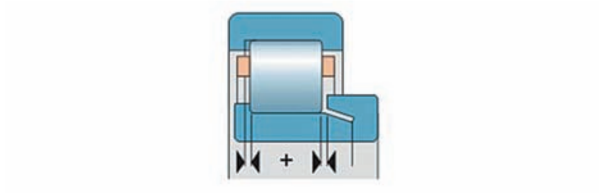


Table 4: Axial internal clearance of cylindrical roller bearings of NJ design with HJ angle ring

Bore Diameter	Bore size	Axial internal clearance of bearing of series									
d		NJ2+HJ		NJ3+HJ		NJ4+HJ		NJ22+HJ		NJ23+HJ	
		min	max	min	max	min	max	min	max	min	max
mm		µ m									
15	02	42	165	42	165	–	–	–	–	–	–
17	03	42	165	42	165	–	–	42	165	52	183
20	04	42	165	42	165	–	–	52	185	52	183
25	05	42	165	52	185	–	–	52	185	52	183
30	06	42	165	52	185	60	200	52	185	52	183
35	07	52	185	52	185	60	200	52	185	72	215
40	08	52	185	52	185	60	200	52	185	72	215
45	09	52	185	52	185	60	200	52	185	72	215
50	10	52	185	52	185	80	235	52	185	72	215
55	11	52	185	72	215	80	235	52	185	72	215
60	12	52	185	72	215	80	235	72	215	102	275
65	13	52	185	72	215	80	235	72	215	102	275
70	14	52	185	72	215	80	235	72	215	102	275
75	15	52	185	72	215	80	235	72	215	102	275
80	16	52	185	72	215	80	235	72	215	102	275
85	17	72	215	72	215	110	290	72	215	102	275
90	18	72	215	72	215	110	290	72	215	102	275
95	19	72	215	72	215	110	290	72	215	102	275
100	20	72	215	102	275	110	290	102	275	140	375
105	21	72	215	102	275	110	290	102	275	140	375
110	22	72	215	102	275	110	290	102	275	140	375
120	24	72	215	102	275	110	310	102	275	140	375
130	26	72	215	102	275	110	310	102	275	140	375
140	28	72	215	102	275	140	385	102	275	140	375
150	30	72	215	102	275	140	385	102	275	140	375
160	32	102	275	102	275			140	375	140	375
170	34	102	275					140	375		
180	36	102	275					140	375		
190	38	102	275								
200	40	102	275								
220	44	110	290								
240	48	110	310								
260	52	110	310								
280	56	110	310								

Misalignment:

The capability of single row cylindrical roller bearings to accommodate angular misalignment of the inner ring with respect to the outer ring is limited to a few minutes of arc. The actual values are

–	4 minutes of arc for bearings of 10, 12, 2, 3 and 4 series
–	3 minutes of arc for bearings of the 20, 22 and 23 series.

These guideline values apply to non–locating bearings, providing the positions of the shaft and housing axes remain constant. Larger misalignments may be possible but may result in shorter bearing service life.

When the bearings are used to locate the shaft axially, guideline values must be reduced as uneven flange loading can lead to increased wear and possibly even to flange fracture.

The maximum values for misalignment do not apply to bearings of the NUP design or NJ design with an HJ angle ring. Because these bearings have two inner and outer ring flanges and the axial internal clearance is relatively small, axial stress is possibly produced.

Influence of operating temperature on bearing material:

Cylindrical roller bearings undergo a special heat treatment. When equipped with a steel or brass cage, they can operate at temperatures up to +150℃.

Cages:

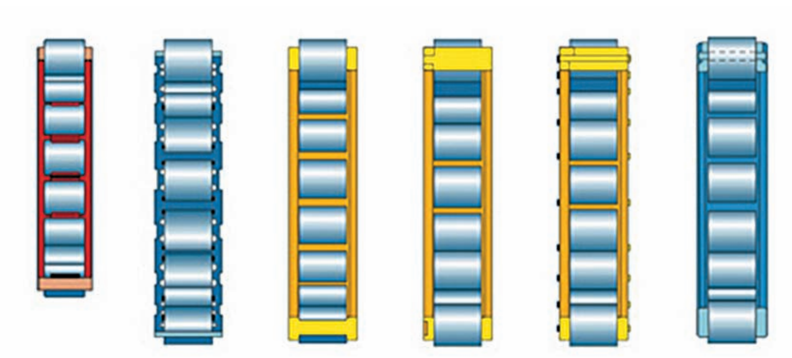
Depending on the bearing series, sizes and designs, cylindrical roller bearings are fitted as standard with one of the following cages.

–	an injection moulded window–type cage of glass fiber reinforced polyamide 66,roller centred.
–	a pressed window–type cage of unhardened steel, roller centred
–	a one–piece machined window–type brass cage, inner or outer ring centred
–	a two–piece machined brass cage,roller centred,designation suffix M,or outer ring centred,
–	designation suffix MA, or inner ring centred, designation suffix MB
–	large cylindrical roller bearings can be equipped with steel pin–type cage for pierced rollers.

Note:

Single row cylindrical roller bearings with polyamide 66 cages can be operated at temperatures up to +120℃. The lubricants generally used for rolling bearings do not have a detrimental effect on cage properties, with the exception for a few synthetic oils and greases with synthetic base oil as well as some lubricants containing a high proportion of EP additives when used at elevated temperatures.

For bearing arrangements of continuous high temperatures or under tough conditions, the use of bearings with a metallic cage is recommended. For applications in equipment using refrigerants such as ammonia or freon replacements, bearings with a polyamide cage can be used for operating temperatures up to 70℃ . At higher operating temperatures bearings with machined brass or steel cage should be used.



Minimum load:

In order to provide satisfactory operation, single row cylindrical roller bearings, like all ball and roller bearings, must always be subjected to a given minimum load, particularly when they are operated at high speeds or are subjected to high accelerations or rapid changes in the direction of load. Under such conditions, the inertia forces of the rollers and cage, and the friction in the lubricant, can have a detrimental influence on the rolling conditions in the bearing arrangement and may cause damaging sliding movements between rollers and raceways.

The requisite minimum load applied to single row cylindrical roller bearings can be estimated using

$$F_{rm} = K_r \left[6 + \frac{4n}{N_r}\right]\left[\frac{d_m}{100}\right]^2$$

Frm	=	minimum radial load, kN
kr	=	minimum load factor (see product table)
n	=	rotational speed, r/min
Nr	=	reference speed, r/min (see product table)
dm	=	mean diameter of bearing
	=	0,5 (d + D), mm

When starting up at low temperatures or when the lubricant is highly viscous, even greater minimum loads may be required. The weight of the components supported by the bearing, together with external forces, generally exceeds the requisite minimum load. If this is not the case, the single row cylindrical roller bearing must be subjected to an additional radial load.

Dynamic axial load carrying capacity:

Single row cylindrical roller bearings with flanges on both inner and outer rings can support axial loads in addition to radial loads. Their axial load carrying capacity is primarily determined by the ability of the sliding surfaces of the roller end/flange contact to support loads. Factors having the greatest effect on this ability are the lubrication, operating temperature and heat dissipation from the bearing.

Assuming the conditions cited below, the permissible axial load can be calculated with sufficient accuracy from.

$$F_{ap} = \frac{K_1 c_0 10^4}{n(d+D)} - K_2 F_r$$

Fap	=	permissible axial load, kN
Co	=	permissible axial load, ,kN
Fr	=	actual radial bearing load,kN
n	=	rotational speed, r/min
d	=	bearing bore diameter,mm
D	=	bearing outside diameter ,mm
K1	=	a factor
	=	1,5 for oil lubrication
	=	1 for grease lubrication
k2	=	a factor
	=	0,15 for oil lubrication
	=	0,1 for grease lubrication

The above equation is based on conditions that are considered typically for normal bearing operation, i.e.

–	difference of 60℃ between the bearing operating temperature and the ambient temperature
–	a specific heat loss from the bearing of 0,5 mW/mm2 C; with reference to the bearing outside Diameter surface (D B)
–	a viscosity ratio k ⩾ 2, see section "Lubrication conditions – the viscosity ratio k".

For grease lubrication the viscosity of the base oil in the grease may be used. If k is less than 2, the friction will increase and there will be more wear. These effects can be reduced at low speeds, for example, by using oils with AW (anti–wear) and/or EP (extreme pressure) additives.

Where axial loads act for longer periods and the bearings are grease lubricated, it is advisable to use grease that has good oil bleeding properties at the operating temperatures (> 3 % according to DIN 51 817). Frequent re–lubrication is also recommended.

The values of the permissible load Fap obtained from the heat balance equation are valid for a continuously acting constant axial load and adequate lubricant supply to the roller end/flange contacts. Where axial loads act only for short periods, the values may be multiplied by a factor of 2, or for shock loads by a factor of 3, provided the limits given in the following with regard to flange strength are not exceeded

To avoid any risk of flange breakage, the constant axial acting load applied to the bearings should never exceed
$F_a max = 0,\ 0045\ D^{1.5}$ (bearings in the 2 Diameter Series)

Or
$F_a max = 0,\ 0023\ D^{1.7}$ (bearings in other series) When acting only occasionally and for brief periods, the axial load applied to the bearings should never exceed
$F_a max = 0{,}013\ D^{1.5}$ (bearings in the 2 Diameter Series)
Or
$F_a max = 0{,}007\ D^{1.7}$ (bearings in other series)

where		
$F_a max$	=	maximum constantly or occasionally acting axial load, kN
D	=	bearing outside diameter, mm

To obtain an even flange load and provide sufficient running accuracy of the shaft when single row cylindrical roller bearings are subjected to heavy axial loads, axial runout and the size of the abutment surfaces of adjacent components become particularly important. Regarding the axial runout it is recommended to use values given in the table. As to the diameter of the abutment surfaces, it is recommended to support the inner ring at the height corresponding to half of the flange height. For the inner ring flange, for example, the abutment diameter can be obtained using $d_{as} = 0,\ 5\ (d_1 + F)$

where		
d_{as}	=	shaft abutment diameter, mm
d_1	=	inner ring flange diameter, mm
F	=	inner ring raceway diameter, mm

Where the misalignment between the inner and outer rings exceeds 1 minute of arc, the action of the load on the flange changes considerably. The safety factors included in the guideline values may be inadequate.

Equivalent dynamic bearing load:

For non–locating bearings

P=Fr

If bearings with flanges on both inner and outer rings are used to locate a shaft in one or both directions, the equivalent dynamic bearing load should be calculated using

P=F when Fa/Fr⩽e

P=0,92Fr+YFa when Fa/Fr>e

where		
e	=	limiting value
	=	0,2 for bearings in the 18, 19, 10, 2, 3 and 4 series
	=	0,3 for bearings in other series
Y	=	axial load factor
	=	0,6 for bearings in the 18, 19, 10, 2, 3 and 4 series
	=	0,4 for bearings in other series

Since axially loaded cylindrical roller bearings only running well when they are subjected to a simultaneous radial acting load, the ratio Fa/Fr should not exceed 0,5.

Equivalent static bearing load:

P0=Fr

Mounting bearings with a tapered bore:

Bearings with a tapered bore are always mounted with an interference fit on their seating on the shaft. The reduction in radial internal clearance or the axial displacement (drive–up) of the inner ring on its seating are used as a measure of the degree of interference. For cylindrical roller bearings, the clearance reduction method is preferred as this is a relatively simple procedure. It is simply a matter of measuring the expansion of the inner ring, i.e. the enlargement of the inner ring raceway diameter; this can be measured by using a stirrup gauge.

For large bearings of the NN design, however, suitable gauges are not available so that it is difficult to determine the inner ring expansion with sufficient accuracy; it is simpler to use the axial drive–up on the tapered seating as a measure of the interference.

In table 3 guideline values are given for the clearance reduction as well as the axial displacement "s" for cylindrical roller bearings with tapered bore. The fit obtained by using these recommendations has sufficient interference, particularly if the larger clearance reduction value is achieved. The minimum value is primarily applied for bearings which have a radial internal clearance before mounting and the radial internal clearance is close to the lower limit of the particular range, see clearance tables. There will then be no risk of going below the corresponding minimum value of the recommended final clearance.

Heavy loads, high speeds or a large temperature difference between inner and outer rings under external heating can make it advisable to have a rather larger internal clearance after mounting. In such cases bearings having a larger radial internal clearance than class Normal (C3 or C4) should be used and where possible the maximum value for the clearance reduction is applied.

Measuring bearing clearance:

To measure the internal clearance of cylindrical roller bearings before mounting, feeler gauges having blades starting with a thickness of 0, 03 mm are suitable. The same procedure should be applied as what described in the section "Spherical roller bearings" under the heading "Measuring clearance reduction".

Full Complement Cylindrical Roller Bearings

● Single row full complement cylindrical roller bearings

Features

Single row full complement cylindrical roller bearings have solid outer and inner rings together with rib–guided cylindrical rollers. Since these bearings have the largest possible number of rolling elements, they have extremely high radial load carrying capacity, high rigidity and are suitable for particularly compact designs. Due to the kinematic conditions, however, they do not achieve the high speeds that are possible when using cylindrical roller bearings with cage.
Single row full complement cylindrical roller bearings are in the form of semi–locating bearings.

Semi–locating bearings:

Semi–locating bearings are available in single row design as SL1818 (dimension series 18), SL1829 (dimension series 29), SL1830 (dimension series 30), SL1822 (dimension series 22) and SL1923 (dimension series 23). They can support not only high radial forces but also axial forces in one direction and can therefore guide shafts axially in one direction. They act as non–locating bearings in the opposite direction.

Series SL1923 has only one rib on the inner ring and a self–retaining rolling element set. As a result, the inner ring can be removed from the bearing. This makes fitting and dismantling considerably easier.

Caution! The bearings SL1818, SL1829, SL1830 and SL1822 are held together in handling and transport by a transport and mounting retaining device on the outer ring. This retaining device remains in the bearing and must not be subjected to axial load.

Sealing:

The cylindrical roller bearings are supplied in an open design.

Lubrication:

They are not supplied greased and can be lubricated with oil or grease via the end faces.

Operating temperature:

Full complement cylindrical roller bearings are suitable for operating temperatures from –30℃ to +120℃.

Suffixes:

Suffixes for available designs: see table.

	Suffix	Description	Design
Available designs	BR	Black oxide coated	Available by agreement
	C3	Radial internal clearance larger than normal	
	C4	Radial internal clearance larger than C3	
	C5	Radial internal clearance larger than C4	
	E	Increased capacity design	Standard depending on series, see dimension table
	TB	Bearing with increased axial load carrying capacity	Standard depending on bearing size, see dimension table

	Series	From bore diameter d (mm)
Available bearings of TB design	SL1818	460
	SL1822	140
	SL1829	300
	SL1830	180
	SL1923	90

● Double row full complement cylindrical roller bearings

Features

The bearings have solid outer and inner rings and rib–guided cylindrical rollers. Since these bearings have the largest possible number of rolling elements, they have extremely high radial load carrying capacity, high rigidity and are suitable for particularly compact designs. Due to the kinematic conditions, however, they do not achieve the high speeds that are possible when using cylindrical roller bearings with cage.

Double row full complement cylindrical roller bearings are available as non–locating, semi–locating and locating bearings. The bearings do not permit any skewing between the inner and outer ring.

Non–locating bearings:

Bearings SL0248 (designation to DIN 5 412–9: NNCL 48...V) and SL0249 (designation to DIN 5 412–9: NNCL 49...V) are non–locating bearings and can support radial forces only.

Caution! The bearings are held together in handling and transport by a transport and mounting retaining device on the outer ring. This retaining device remains in the bearing and must not be subjected to axial load.

Sealing:

The cylindrical roller bearings are supplied in an open design.

Lubrication:

Oil or grease lubrication is possible. For lubrication, the outer ring has a lubrication groove and lubrication holes.

Semi–locating bearings:

The semi–locating bearings are available as SL1850 (dimension series 50). They can support not only high radial forces but also axial forces in one direction and can therefore guide shafts axially in one direction. They act as non–locating bearings in the opposite direction.

Caution! The bearings are held together in handling and transport by a transport and mounting retaining device on the outer ring. This retaining device remains in the bearing and must not be subjected to axial load.

Sealing:

The cylindrical roller bearings are supplied in an open design.

Lubrication:

Oil or grease lubrication is possible. The bearings can be lubricated via the end faces as well as via a lubrication groove and lubrication holes in the outer ring.

Locating bearings:

Bearings SL0148 (designation to DIN 5 412–9: NNC 48...V) and SL0149 (designation to DIN 5 412–9: NNC 49...V) are locating bearings. These bearings can support axial forces from both directions as well as radial forces

Caution! The outer ring has ribs on both sides, is axially split and held together by retaining rings. The inner ring has an additional central rib. The retaining rings must not be subjected to axial load.

Cable sheave bearings:

Cable sheave bearings (cylindrical roller bearings with snap ring grooves) are locating bearings. These bearings are very rigid and can support moderate axial forces in both directions as well as high radial forces. They consist of solid outer and inner rings with ribs, rib–guided cylindrical rollers and sealing rings.

The outer rings have snap ring grooves for retaining rings. The inner rings are axially split, 1 mm wider than the outer rings and held together by a rolled–in steel strip.

Cylindrical roller bearings with snap ring grooves are available as a light series SL04...–PP and in the dimension series 50 as SL0450...–PP.

Sealing:

In the case of cable sheave bearings, the running system is protected against contamination and moisture by sealing rings on both sides.

Lubrication:

Open locating bearings can be lubricated with oil or grease. For lubrication, the outer ring has a lubrication groove and lubrication holes.

Cable sheave bearings are greased using a lithium complex soap grease and can be lubricated via the outer or inner ring.

Operating temperature:

Open full complement cylindrical roller bearings are suitable for operating temperatures from –30℃ to +120 ℃.

Caution! Cylindrical roller bearings with snap ring grooves are suitable for operating temperatures from –20℃ to +80 ℃, restricted by the grease and seal material.

Suffixes:

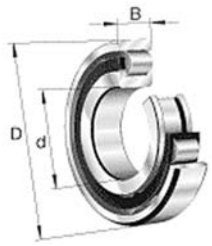
Suffixes for available designs: see table.

	Suffix	Description	Design
Available designs of SL01, SL02, SL1850	BR	Black oxide coated	Available by agreement
	C3	Radial internal clearance larger than normal	
	C4	Radial internal clearance larger than C3	
	C5	Radial internal clearance larger than C4	
	TB	Bearing with increased axial load carrying capacity	

	Suffix	Description	Design
Available designs of cable sheave bearings	C3	Radial internal clearance larger than normal	Available by agreement
	C4	Radial internal clearance larger than C3	
	C5	Radial internal clearance larger than C4	
	RR	Corrosion–resistant design, with Corrotect coating	
	2NR	Cable sheave bearing supplied with two loose–packed retaining rings WRE	
	–	Without seals	
	P	Seal on one side	
	PP	Seals on both sides, for cable sheave bearings	Standard

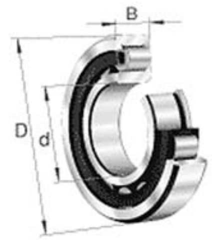
N design

The inner ring has two integral flanges and the outer ring is without flanges. Axial displacement of the shaft with respect to the housing can be accommodated in both directions within the bearing itself. The bearings are therefore used as non–locating bearings.



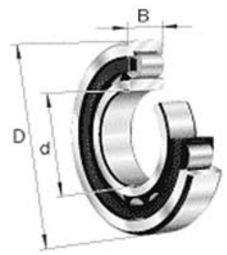
NJ design

The outer ring has two integral flanges and the inner ring one integral flange. The bearings are therefore suitable for the axial location of a shaft in one direction.



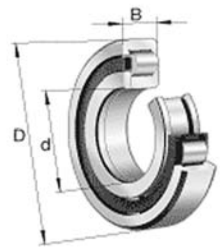
NU design

The outer ring of bearings of the NU design has two integral flanges and the inner ring is without flanges. Axial displacement of the shaft with respect to the housing can be accommodated in both directions within the bearing itself. The bearings are therefore used as non–locating bearings. For manufacturing and maintenance reasons, the two outer ring flanges of large–size bearings of the NU design which are identified by a Drawing No. may not be integral but take the form of loose flange rings.



NUP design

The outer ring has two integral flanges and the inner ring one integral flange and one non–integral flange in the form of a loose flange ring . The bearings can be used as locating bearings, i.e. they can provide axial location for a shaft in both directions.

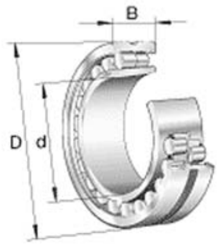


NN design

Double row cylindrical roller bearings mainly in the NN design. The bearings are separable, i.e. the ring with integral flanges together with the roller and cage assemblies can be mounted separately from the other bearing ring or all bearing components can be mounted separately. This facilitates the mounting, inspection and maintenance of these bearings.

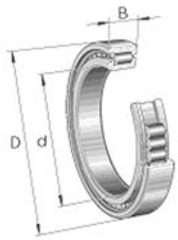
NNU design

Double row cylindrical roller bearings mainly in the NNU design . The bearings are separable, i.e. the ring with integral flanges together with the roller and cage assemblies can be mounted separately from the other bearing ring or all bearing components can be mounted separately. This facilitates the mounting, inspection and maintenance of these bearings.



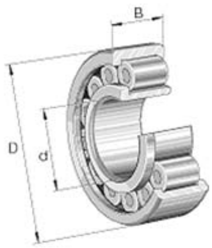
SL1818, SL1822, SL1829,SL1830 design

Semi–locating bearing, full complement roller set



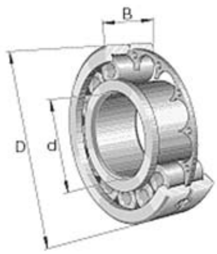
SL1923 design

Semi–locating bearing, full complement roller set, self–retaining roller set



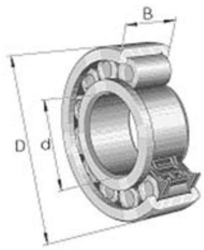
LSL1923 design

Semi–locating bearing, with disc cage



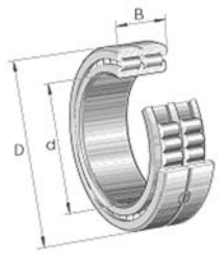
ZSL1923 design

Semi–locating bearing, with spacers



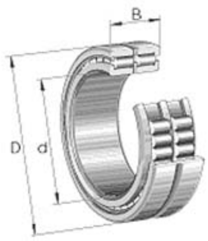
SL0148, SL0149 design

Locating bearing, double row, full complement roller set



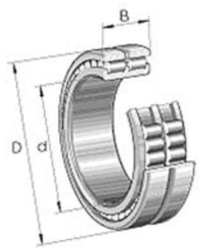
SL1850 design

Semi–locating bearing, double row, full complement cylindrical roller set



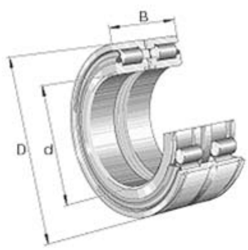
SL0248, SL0249 design

Non–locating bearing, double row, full complement roller set

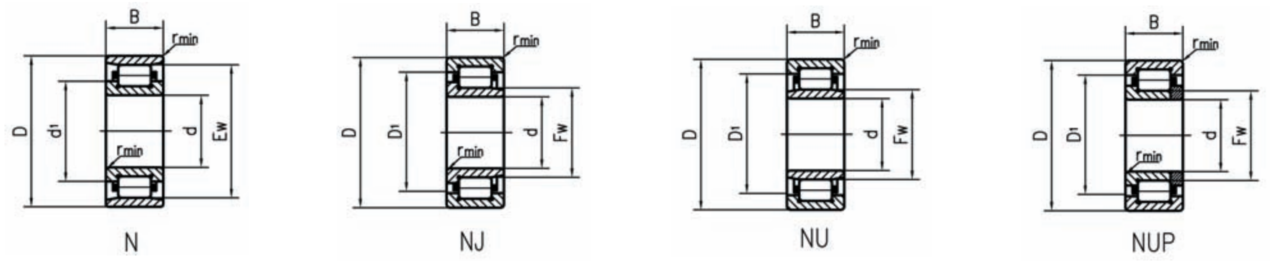


SL04...PP, SL0450...PP design

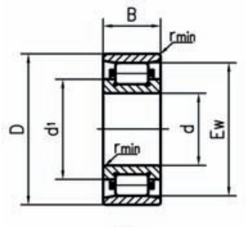
Locating bearing, double row, full complement roller set, with annular slots, lip seals on both sides



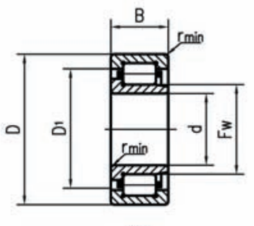
N, NJ, NU, NUP Series



Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NU202ECP	15	35	11	0.6	—	27.9	19.3	0.048	12.7	10.4	22000
NJ202ECP	15	35	11	0.6	—	27.9	19.3	0.049	12.7	10.4	22000
N203E	17	40	12	0.6	25	—	35.1	0.068	17.6	14.6	18000
NJ203E	17	40	12	0.6	—	32.4	22.1	0.07	17.6	14.6	18000
NU203E	17	40	12	0.6	—	32.4	22.1	0.069	17.6	14.6	18000
NUP203E	17	40	12	0.6	—	32.4	35.1	0.073	17.6	14.6	18000
NJ2203E	17	40	16	0.6	—	32.4	22.1	0.053	24	22	18000
NU2203E	17	40	16	0.6	—	32.4	22.1	0.051	24	22	18000
NUP2203E	17	40	16	0.6	—	32.4	22.1	0.055	24	22	18000
N303E	17	47	14	1	27.7	—	40.2	0.124	25.5	21.2	16000
NJ303E	17	47	14	1	—	37	24.2	0.124	25.5	21.2	16000
NU303W	17	47	14	1	—	37	24.2	0.122	25.5	21.2	16000
NUP303E	17	47	14	1	—	37	24.2	0.127	25.5	21.2	16000
N204E	20	47	14	1	29.7	—	41.5	0.112	27.5	24.5	16000
NJ204E	20	47	14	1	—	38.8	26.5	0.117	27.5	24.5	16000
NU204E	20	47	14	1	—	38.8	26.5	0.114	27.5	24.5	16000
NUP204E	20	47	14	1	—	38.8	26.5	0.119	27.5	24.5	16000
NJ2204E	20	47	18	1	—	38.8	26.5	0.15	32.5	31	16000
NU2204E	20	47	18	1	—	38.8	26.5	0.146	32.5	31	16000
NUP2204E	20	47	18	1	—	38.8	26.5	0.154	32.5	31	16000
N304E	20	52	15	1.1	31.2	—	45.5	0.16	31.5	27	14000
NJ304E	20	52	15	1.1	—	42.4	27.5	0.156	31.5	27	14000
NU304E	20	52	15	1.1	—	42.4	27.5	0.153	31.5	27	14000
NUP304E	20	52	15	1.1	—	42.4	27.5	0.16	31.5	27	14000
NJ2304E	20	52	21	1.1	—	42.4	27.5	0.219	41.5	39	14000
NU2304E	20	52	21	1.1	—	42.4	27.5	0.215	41.5	39	14000
NUP2304E	20	52	21	1.1	—	42.4	27.5	0.224	41.5	39	14000
NU1005	25	47	12	0.6	—	38.8	30.5	0.083	13.4	12	18000
N205E	25	52	15	1	34.7	—	46.5	0.135	29	27.5	15000



N



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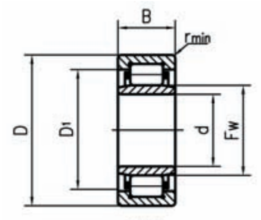

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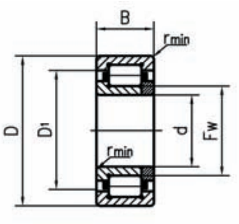
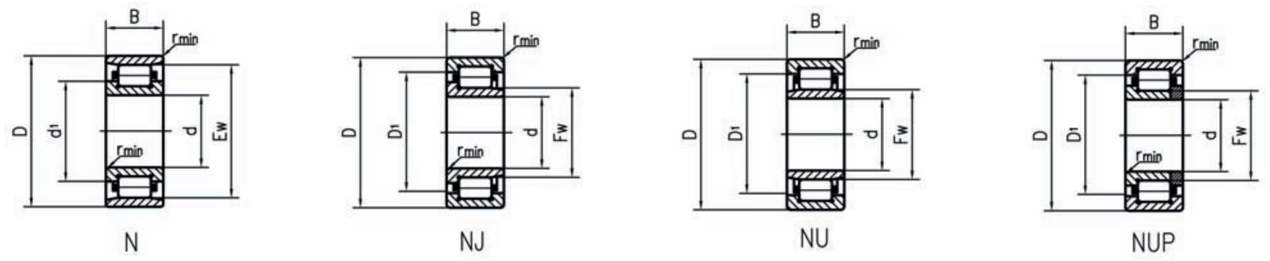


NUP

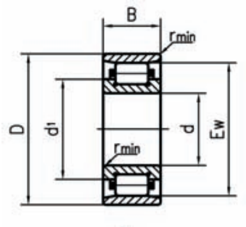
Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NJ205E	25	52	15	1	—	43.8	31.5	0.14	29	27.5	15000
NU205E	25	52	15	1	—	43.8	31.5	0.137	29	27.5	15000
NUP205E	25	52	15	1	—	43.8	31.5	0.145	29	27.5	15000
NJ2205E	25	52	18	1	—	43.8	31.5	0.169	34.5	34.5	15000
NU2205E	25	52	18	1	—	43.8	31.5	0.164	34.5	34.5	15000
NUP2205E	25	52	18	1	—	43.8	31.5	0.174	34.5	34.5	15000
N305E	25	62	17	1.1	38.1	—	54	0.242	41.5	37.5	12000
NJ305E	25	62	17	1.1	—	50.7	34	0.25	41.5	37.5	12000
NU305E	25	62	17	1.1	—	50.7	34	0.245	41.5	37.5	12000
NUP305E	25	62	17	1.1	—	50.7	34	0.256	41.5	37.5	12000
NJ2305E	25	62	24	1.1	—	50.7	34	0.356	57	56	12000
NU2305E	25	62	24	1.1	—	50.7	34	0.349	57	56	12000
NUP2305E	25	62	24	1.1	—	50.7	34	0.363	57	56	12000
NU1006	30	55	13	1	—	45.6	36.5	0.129	16.6	16	12000
N206E	30	62	16	1	41.2	—	55.5	0.205	39	37.5	12000
NJ206E	30	62	16	1	—	52.5	37.5	0.213	39	37.5	12000
NU206E	30	62	16	1	—	52.5	37.5	0.208	39	37.5	12000
NUP206E	30	62	16	1	—	52.5	37.5	0.219	39	37.5	12000
NJ2206E	30	62	20	1	—	52.5	37.5	0.261	55	49	12000
NU2206E	30	62	20	1	—	52.5	37.5	0.255	55	49	12000
NUP2206E	30	62	20	1	—	52.5	37.5	0.268	55	49	12000
N306E	30	72	19	1.1	45	—	62.5	0.366	51	48	10000
NJ306E	30	72	19	1.1	—	58.9	40.5	0.376	51	48	10000
NU306E	30	72	19	1.1	—	58.9	40.5	0.368	51	48	10000
NUP306E	30	72	19	1.1	—	58.9	40.5	0.385	51	48	10000
NJ2306E	30	72	27	1.1	—	58.9	40.5	0.54	83	75	10000
NU2306E	30	72	27	1.1	—	58.9	40.5	0.529	83	75	10000
NUP2306E	30	72	27	1.1	—	58.9	40.5	0.551	83	75	10000
NU1007M	35	62	14	1	—	54.5	42	0.181	35.8	38	20000

Cylindrical Roller Bearings

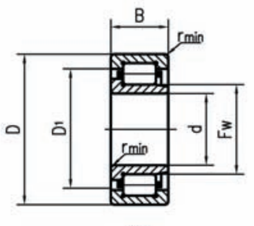
N, NJ, NU, NUP Series



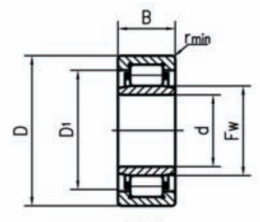
Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
N207E	35	72	17	1.1	48.1	—	64	0.301	56	48	10000
NJ207E	35	72	17	1.1	—	60.7	44	0.309	56	48	10000
NU207E	35	72	17	1.1	—	60.7	44	0.303	56	48	10000
NUP207E	35	72	17	1.1	—	60.7	44	0.317	56	48	10000
NJ2207E	35	72	23	1.1	—	60.7	44	0.416	69.5	63	10000
NU2207E	35	72	23	1.1	—	60.7	44	0.406	69.5	63	10000
NUP2207E	35	72	23	1.1	—	60.7	44	0.427	69.5	63	10000
N307E	35	80	21	1.5	51	—	70.2	0.486	75	63	9000
NJ307E	35	80	21	1.5	—	66.3	46.2	0.496	75	63	9000
NU307E	35	80	21	1.5	—	66.3	46.2	0.486	75	63	9000
NUP307E	35	80	21	1.5	—	66.3	46.2	0.506	75	63	9000
NJ2307E	35	80	31	1.5	—	66.3	46.2	0.736	106	98	9000
NU2307E	35	80	31	1.5	—	66.3	46.2	0.723	106	98	9000
NUP2307E	35	80	31	1.5	—	66.3	46.2	0.751	106	98	9000
NU1008ML	40	68	15	1	—	57.6	47	0.23	29	26	19000
N208E	40	80	18	1.1	54	—	71.5	0.358	62	53	9000
NJ208E	40	80	18	1.1	—	67.9	49.5	0.389	62	53	9000
NU208E	40	80	18	1.1	—	67.9	49.5	0.379	62	53	9000
NUP208E	40	80	18	1.1	—	67.9	49.5	0.399	62	53	9000
NJ2208E	40	80	23	1.1	—	67.9	49.5	0.504	81.5	75	9000
NU2208E	40	80	23	1.1	—	67.9	49.5	0.492	81.5	75	9000
NUP2208E	40	80	23	1.1	—	67.9	49.5	0.518	81.5	75	9000
N308E	40	90	23	1.5	57.5	—	80	0.656	81.5	78	7500
NJ308E	40	90	23	1.5	—	75.6	52	0.674	81.5	78	7500
NU308E	40	90	23	1.5	—	75.6	52	0.659	81.5	78	7500
NUP308E	40	90	23	1.5	—	75.6	52	0.688	81.5	78	7500
NJ2308W	40	90	33	1.5	—	75.6	52	0.978	129	120	7500
NU2308E	40	90	33	1.5	—	75.6	52	0.958	129	120	7500
NUP2308E	40	90	33	1.5	—	75.6	52	0.999	129	120	7500



N



NJ



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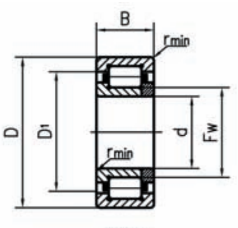
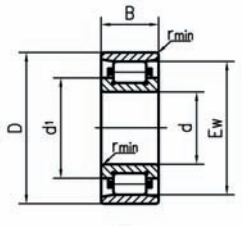


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NU1009M	45	75	16	1	—	65.3	52.5	0.28	34.5	52	16000
N209E	45	85	19	1.1	59	—	76.5	0.434	61	63	8500
NJ209E	45	85	19	1.1	—	73	54.5	0.445	61	63	8500
NU209E	45	85	19	1.1	—	73	54.5	0.434	61	63	8500
NUP209E	45	85	19	1.1	—	73	54.5	0.457	61	63	8500
NJ2209E	45	85	23	1.1	—	73	54.5	0.544	73.5	81.5	8500
NU2209E	45	85	23	1.1	—	73	54.5	0.532	73.5	81.5	8500
NUP2209E	45	85	23	1.1	—	73	54.5	0.559	73.5	81.5	8500
N309E	45	100	25	1.5	64.4	—	88.5	0.891	98	100	6700
NJ309E	45	100	25	1.5	—	83.8	58.5	0.913	98	100	6700
NU309E	45	100	25	1.5	—	83.8	58.5	0.893	98	100	6700
NUP309E	45	100	25	1.5	—	83.8	58.5	0.934	98	100	6700
NJ2309E	45	100	36	1.5	—	83.8	58.5	1.33	137	153	6700
NU2309E	45	100	36	1.5	—	83.8	58.5	1.3	137	153	6700
NUP2309E	45	100	36	1.5	—	83.8	58.5	1.36	137	153	6700
NU1010ML	50	80	16	1.1	—	70	57.5	0.268	36	41.5	15000
N210E	50	90	20	1.1	64	—	81.5	0.488	64	68	8000
NJ210E	50	90	20	1.1	—	78	59.5	0.503	64	68	8000
NU210E	50	90	20	1.1	—	78	59.5	0.49	64	68	8000
NUP210E	50	90	20	1.1	—	78	59.5	0.517	64	68	8000
NJ2210E	50	90	23	1.1	—	78	59.5	0.586	78	88	8000
NU2210E	50	90	23	1.1	—	78	59.5	0.573	78	88	8000
NUP2210E	50	90	23	1.1	—	78	59.5	0.6	78	88	8000
N310E	50	110	27	2	71.2	—	97	1.16	110	114	6300
NJ310E	50	110	27	2	—	91.2	65	1.19	110	114	6300
NU310E	50	110	27	2	—	91.2	65	1.16	110	114	6300
NUP310E	50	110	27	2	—	91.2	65	1.21	110	114	6300
NJ2310E	50	110	40	2	—	91.2	65	1.77	163	186	6300
NU2310E	50	110	40	2	—	91.2	65	1.75	163	186	6300



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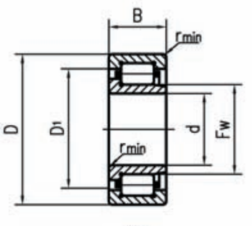

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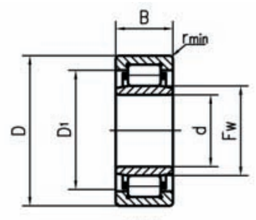

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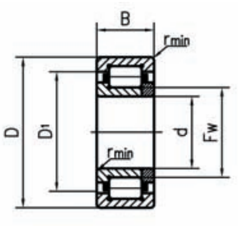
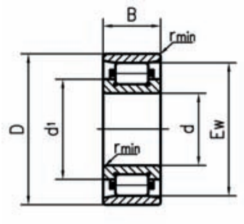


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NUP2310E	50	110	40	2	—	91.2	65	1.82	163	186	6300
NU1011M	55	90	18	1.1	—	79	64.5	0.45	41.5	50	14000
N211E	55	100	21	1.5	70.8	—	90	0.668	83	95	7000
NJ211E	55	100	21	1.5	—	86.3	66	0.679	83	95	7000
NU211E	55	100	21	1.5	—	86.3	66	0.665	83	95	7000
NUP211E	55	100	21	1.5	—	86.3	66	0.693	83	95	7000
NJ2211E	55	100	25	1.5	—	86.3	66	0.812	98	118	7000
NU2211E	55	100	25	1.5	—	86.3	66	0.796	98	118	7000
NUP2211E	55	100	25	1.5	—	86.3	66	0.828	98	118	7000
N311E	55	120	29	2	77.5	—	106.5	1.48	134	140	5600
NJ311E	55	120	29	2	—	101	70.5	1.51	134	140	5600
NU311E	55	120	29	2	—	101	70.5	1.48	134	140	5600
NUP311E	55	120	29	2	—	101	70.5	1.54	134	140	5600
NJ2311E	55	120	43	2	—	101	70.5	2.27	200	228	5600
NU2311E	55	120	43	2	—	101	70.5	2.23	200	228	5600
NUP2311E	55	120	43	2	—	101	70.5	2.31	200	228	5600
NU1012ML	60	95	18	1.1	—	81.6	69.5	0.478	44	55	13000
N212E	60	110	22	1.5	77.5	—	100	0.827	95	1.4	6300
NJ212E	60	110	22	1.5	—	95.7	72	0.845	95	1.4	6300
NU212E	60	110	22	1.5	—	95.7	72	0.824	95	1.4	6300
NUP212E	60	110	22	1.5	—	95.7	72	0.909	95	1.4	6300
NJ2212E	60	110	28	1.5	—	95.7	72	1.1	129	153	6300
NU2212E	60	110	28	1.5	—	95.7	72	1.08	129	153	6300
NUP2212E	60	110	28	1.5	—	95.7	72	1.12	129	153	6300
N312E	60	130	31	2.1	84.3	—	115	1.84	150	156	5000
NJ312E	60	130	31	2.1	—	110	77	1.89	150	156	5000
NU312E	60	130	31	2.1	—	110	77	1.85	150	156	5000
NUP312E	60	130	31	2.1	—	110	77	1.93	150	156	5000



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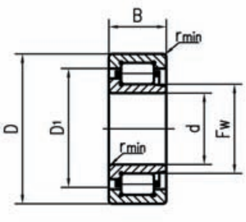

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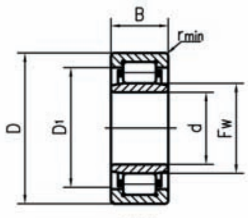

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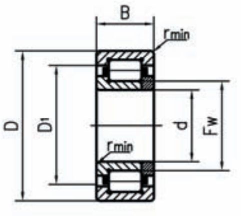
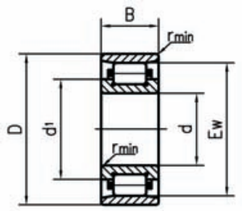


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NJ2312E	60	130	46	2.1	—	110	77	2.83	224	260	5000
NU2312E	60	130	46	2.1	—	110	77	2.78	224	260	5000
NUP2312E	60	130	46	2.1	—	110	77	2.88	224	260	5000
NU1013ML	65	100	18	1.1	—	88.5	74.5	0.512	45	58.5	12000
N213E	65	120	23	1.5	84.4	—	108.5	1.05	108	120	6000
NJ213E	65	120	23	1.5	—	104	78.5	1.06	108	120	6000
NU213E	65	120	23	1.5	—	104	78.5	1.04	108	120	6000
NUP213E	65	120	23	1.5	—	104	78.5	1.09	108	120	6000
NJ2213E	65	120	31	1.5	—	104	78.5	1.46	150	183	5600
NU2213E	65	120	31	1.5	—	104	78.5	1.43	150	183	5600
NUP2213E	65	120	31	1.5	—	104	78.5	1.54	150	183	5600
N313E	65	140	33	2.1	90.5	—	124.5	2.28	180	190	4800
NJ313E	65	140	33	2.1	—	119	82.5	2.32	180	190	4800
NU313E	65	140	33	2.1	—	119	82.5	2.28	180	190	4800
NUP313E	65	140	33	2.1	—	119	82.5	2.37	180	190	4800
NJ2313E	65	140	48	2.1	—	119	82.5	3.38	245	285	4800
NU2313E	65	140	48	2.1	—	119	82.5	3.32	245	285	4800
NUP2313E	65	140	48	2.1	—	119	82.5	3.45	245	285	4800
NU1014ML	70	110	20	1.1	—	95.4	80	0.706	64	81.5	11000
N214E	70	125	24	1.5	89.4	—	113.5	1.16	120	137	5300
NJ214E	70	125	24	1.5	—	109	83.5	1.18	120	137	5300
NU214E	70	125	24	1.5	—	109	83.5	1.15	120	137	5300
NUP214E	70	125	24	1.5	—	109	83.5	1.2	120	137	5300
NJ2214E	70	125	31	1.5	—	109	83.5	1.55	156	196	5300
NU2214E	70	125	31	1.5	—	109	83.5	1.52	156	196	5300
NUP2214E	70	125	31	1.5	—	109	83.5	1.58	156	196	5300
N314E	70	150	35	2.1	97.3	—	133	2.79	204	220	4500
NJ314E	70	150	35	2.1	—	127	89	2.84	204	220	4500
NU314E	70	150	35	2.1	—	127	89	2.79	204	220	4500



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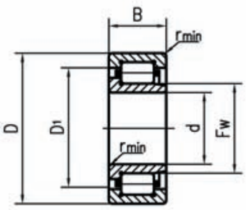

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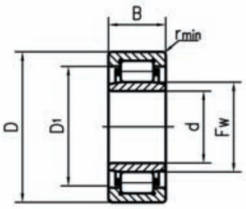

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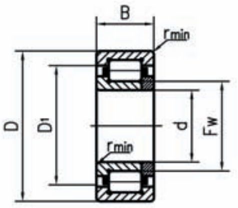
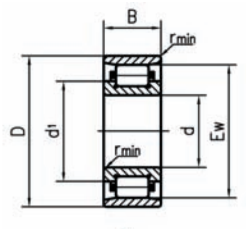


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NUP314E	70	150	35	2.1	—	127	89	2.89	204	220	4500
NJ2314E	70	150	51	2.1	—	127	89	4.09	275	325	4500
NU2314E	70	150	51	2.1	—	127	89	4.02	275	325	4500
NUP2314E	70	150	51	2.1	—	127	89	4.18	275	325	4500
NU1015ML	75	115	20	1.1	—	101	85	0.75	65.5	85	10000
N215E	75	130	25	1.5	94.3	—	118.5	1.29	132	156	5300
NJ215E	75	130	25	1.5	—	114	88.5	1.3	132	156	5300
NU215E	75	130	25	1.5	—	114	88.5	1.27	132	156	5300
NUP215E	75	130	25	1.5	—	114	88.5	1.33	132	156	5300
NJ2215E	75	130	31	1.5	—	114	88.5	1.64	163	208	5300
NU2215E	75	130	31	1.5	—	114	88.5	1.61	163	208	5300
NUP2215E	75	130	31	1.5	—	114	88.5	1.67	163	208	5300
N315E	75	160	37	2.1	104	—	143	3.34	240	265	4000
NJ315E	75	160	37	2.1	—	136	95	3.39	240	265	4000
NU315E	75	160	37	2.1	—	136	95	3.33	240	265	4000
NUP315E	75	160	37	2.1	—	136	95	3.45	240	265	4000
NJ2315E	75	160	55	2.1	—	136	95	5.04	325	390	4000
NU2315E	75	160	55	2.1	—	136	95	4.95	325	390	4000
NUP2315E	75	160	55	2.1	—	136	95	5.14	325	390	4000
NU1016	80	125	22	1.1	—	109	91.5	0.99	76.5	98	9500
N216E	80	140	26	2	101	—	127.3	1.55	140	170	4800
NJ216E	80	140	26	2	—	123	95.3	1.58	140	170	4800
NU216E	80	140	26	2	—	123	95.3	1.54	140	170	4800
NUP216E	80	140	26	2	—	123	95.3	1.62	140	170	4800
NJ2216E	80	140	33	2	—	123	95.3	2.05	186	245	4800
NU2216E	80	140	33	2	—	123	95.3	2.02	186	245	4800
NUP2216E	80	140	33	2	—	123	95.3	2.08	186	245	4800
N316E	80	170	39	2.1	110	—	151	4.12	255	275	3800



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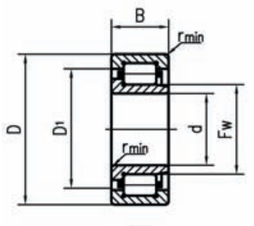

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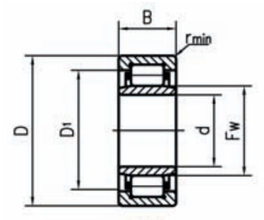

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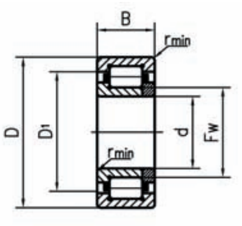
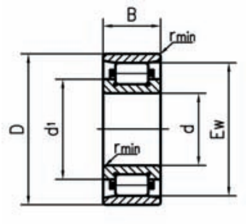


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NJ316E	80	170	39	2.1	—	144	101	4.03	255	275	3800
NU316E	80	170	39	2.1	—	144	101	3.96	255	275	3800
NUP316E	80	170	39	2.1	—	144	101	4.11	255	275	3800
NJ2316E	80	170	58	2.1	—	144	101	6	355	425	3800
NU2316E	80	170	58	2.1	—	144	101	5.89	355	425	3800
NUP2316E	80	170	58	2.1	—	144	101	6.11	355	425	3800
NU1017M	85	130	22	1.1	—	114	96.5	1.05	78	86.5	9000
N217E	85	150	28	2	107	—	136.5	1.92	163	193	4500
NJ217E	85	150	28	2	—	131	100.5	1.95	163	193	4500
NU217E	85	150	28	2	—	131	100.5	1.91	163	193	4500
NUP217E	85	150	28	2	—	131	100.5	2.08	163	193	4500
NJ2217E	85	150	36	2	—	131	100.5	2.55	215	275	4500
NU2217E	85	150	36	2	—	131	100.5	2.5	215	275	4500
NUP2217E	85	150	36	2	—	131	100.5	2.6	215	275	4500
N317E	85	180	41	3	117	—	160	5.3	290	325	5600
NJ317E	85	180	41	3	—	153	108	4.8	290	325	5600
NU317E	85	180	41	3	—	153	108	4.8	290	325	5600
NUP317E	85	180	41	3	—	153	108	4.8	270	300	3600
NJ2317E	85	180	60	3	—	153	108	6.84	365	450	3600
NU2317E	85	180	60	3	—	153	108	6.71	365	450	3600
NUP2317E	85	180	60	3	—	153	108	6.99	365	450	3600
NU1018ML	90	140	24	1.5	—	122	103	1.31	93	125	8500
N218E	90	160	30	2	114	—	145	2.37	183	216	4300
NJ218E	90	160	30	2	—	140	107	2.41	183	216	4300
NU218E	90	160	30	2	—	140	107	2.36	183	216	4300
NUP218E	90	160	30	2	—	140	107	2.46	183	216	4300
NJ2218E	90	160	40	2	—	140	107	3.23	240	315	4300
NU2218E	90	160	40	2	—	140	107	3.17	240	315	4300
NUP2218E	90	160	40	2	—	140	107	3.29	240	315	4300

Cylindrical Roller Bearings

N, NJ, NU, NUP Series



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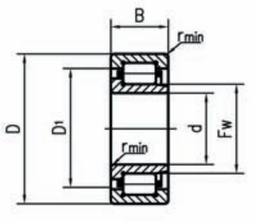

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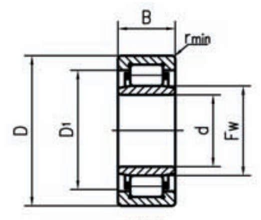

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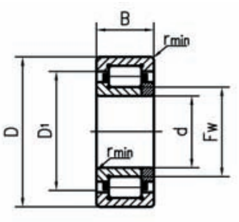
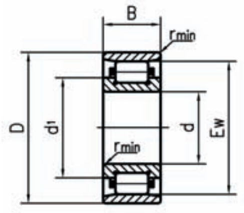


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
N318E	90	190	43	3	124	—	169.5	6.19	315	345	5300
NJ318E	90	190	43	3	—	162	113.5	5.49	315	345	3400
NU318E	90	190	43	3	—	162	113.5	5.39	315	345	3400
NUP318E	90	190	43	3	—	162	113.5	5.59	315	345	3400
NJ2318E	90	190	64	3	—	162	113.5	8.19	430	530	3400
NU2318E	90	190	64	3	—	162	113.5	8.04	430	530	3400
NUP2318E	90	190	64	3	—	162	113.5	8.35	430	530	3400
NU1019ML	95	145	24	1.5	—	127	108	1.42	96.5	129	8000
N219E	95	170	32	2.1	120	—	154.5	2.89	220	265	3800
NJ219E	95	170	32	2.1	—	149	112.5	2.94	220	265	3800
NU219E	95	170	32	2.1	—	149	112.5	2.88	220	265	3800
NUP219E	95	170	32	2.1	—	149	112.5	2.99	220	265	3800
NJ2219E	95	170	43	2.1	—	149	112.5	3.98	285	375	3800
NU2219E	95	170	43	2.1	—	149	112.5	3.9	285	375	3800
NUP2219E	95	170	43	2.1	—	149	112.5	4.05	285	375	3800
N319E	95	200	45	3	132	—	177.5	6.25	335	380	5300
NJ319E	95	200	45	3	—	170	121.5	6.44	335	380	3400
NU319E	95	200	45	3	—	170	121.5	6.32	335	380	3400
NUP319E	95	200	45	3	—	170	121.5	6.55	335	380	3400
NJ2319E	95	200	67	3	—	170	121.5	9.58	455	585	3400
NU2319E	95	200	67	3	—	170	121.5	9.65	455	585	3400
NUP2319E	95	200	67	3	—	170	121.5	9.75	455	585	3400
NU1020M	100	150	24	1.5	—	132	113	1.48	98	134	7500
N220E	100	180	34	2.1	127	—	163	3.5	250	3.5	3800
NJ220E	100	180	34	2.1	—	157	119	3.55	250	3.5	3800
NU220E	100	180	34	2.1	—	157	119	3.49	250	3.5	3800
NUP220E	100	180	34	2.1	—	157	119	3.61	250	3.5	3800
NJ2220E	100	180	46	2.1	—	157	119	4.85	335	440	3800
NU2220E	100	180	46	2.1	—	157	119	4.77	335	440	3800



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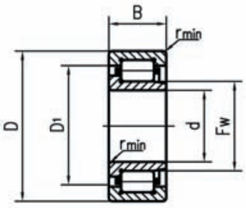

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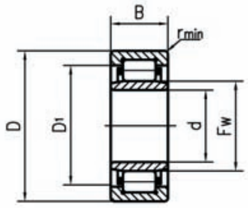

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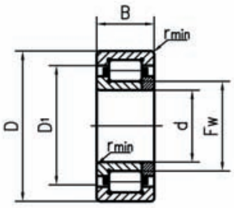
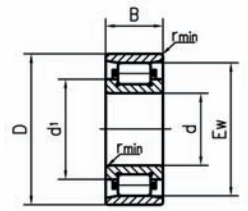


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NUP2220E	100	180	46	2.1	—	157	119	4.92	335	440	3800
N320E	100	215	47	3	139	—	191.5	8.75	380	425	5000
NJ320E	100	215	47	3	—	182	127.5	7.82	380	425	5000
NU320E	100	215	47	3	—	182	127.5	7.67	380	425	5000
NUP320E	100	215	47	3	—	182	127.5	7.96	380	425	5000
NJ2320E	100	215	73	3	—	182	127.5	12.3	570	72	3200
NU2320E	100	215	73	3	—	182	127.5	12.1	570	72	3200
NUP2320E	100	215	73	3	—	182	127.5	12.5	570	72	3200
NU1021M	105	160	26	2	—	140	119.5	1.84	112	153	7000
N221E	105	190	36	2.1	134	—	173	3.95	260	320	5600
NJ221E	105	190	36	2.1	—	164	125	4.17	260	320	5600
NU221E	105	190	36	2.1	—	164	125	4.08	260	320	5600
NUP221E	105	190	36	2.1	—	164	125	4.26	260	320	5600
N321E	105	225	49	2.1	145	—	201	8.65	480	500	3800
NJ321E	105	225	49	2.1	—	190	133	9.00	480	500	3800
NU321E	105	225	49	2.1	—	190	133	8.75	480	500	3800
NU1022M	110	170	28	2	—	149	125	2.31	140	190	7000
N222E	110	200	38	2.1	141	—	180.5	4.8	290	365	3400
NJ222E	110	200	38	2.1	—	174	132.5	4.93	290	365	3400
NU222E	110	200	38	2.1	—	174	132.5	4.84	290	365	3400
NUP222E	110	200	38	2.1	—	174	132.5	5.02	290	365	3400
NJ2222E	110	200	53	2.1	—	174	132.5	6.89	380	520	3400
NUP2222E	110	200	53	2.1	—	174	132.5	7.02	380	520	3400
N322E	110	240	50	3	155	—	211	11.7	440	510	4800
NJ322E	110	240	50	3	—	201	143	10.3	440	510	4800
NU322E	110	240	50	3	—	201	143	10.3	440	510	4800
NUP322E	110	240	50	3	—	201	143	10.7	440	510	4800
NJ2322E	110	240	80	3	—	201	143	16.9	630	800	2800



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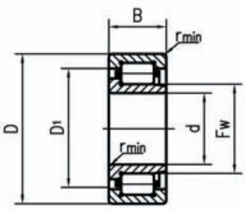

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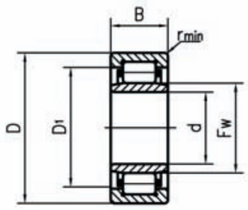

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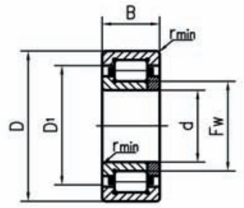

NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
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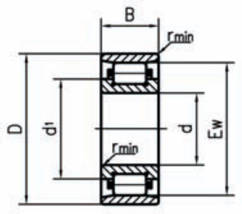
	mm							kg	KN		rpm
NU2322E	110	240	80	3	—	201	143	16.6	630	800	2800
NUP2322E	110	240	80	3	—	201	143	17.2	630	800	2800
NU1024M	120	180	28	2	—	159	135	2.47	150	208	6300
N224E	120	215	40	2.1	153	—	195.5	5.67	335	415	3200
NJ224E	120	215	40	2.1	—	188	143.5	5.91	335	415	3200
NU224E	120	215	40	2.1	—	188	143.5	5.8	335	415	3200
NUP224E	120	215	40	2.1	—	188	143.5	6.02	335	415	3200
NJ2224E	120	215	58	2.1	—	188	143.5	8.54	450	610	3200
NU2224E	120	215	58	2.1	—	188	143.5	8.38	450	610	3200
NUP2224E	120	215	58	2.1	—	188	143.5	8.7	450	610	5000
N324E	120	260	55	3	168	—	230	13.2	520	600	4500
NJ324E	120	260	55	3	—	219	154	13.5	520	600	2800
NU324E	120	260	55	3	—	219	154	13.3	520	600	2800
NUP324E	120	260	55	3	—	219	154	13.8	520	600	2800
NJ2324E	120	260	86	3	—	219	154	23.5	780	1020	4300
NU2324E	120	260	86	3	—	219	154	23.5	780	1020	4300
NUP2324E	120	260	86	3	—	219	154	23.8	780	1020	4300
NU1026M	130	200	33	2	—	175	148	3.8	180	250	5600
N226E	130	230	40	3	164	—	209.5	6.3	360	450	3000
NJ226E	130	230	40	3	—	202	153.5	6.63	360	450	3000
NU226E	130	230	40	3	—	202	153.5	6.5	360	450	3000
NUP226E	130	230	40	3	—	202	153.5	6.74	360	450	3000
NJ2226E	130	230	64	3	—	202	153.5	10.6	530	735	3000
NU2226E	130	230	64	3	—	202	153.5	10.4	530	735	3000
NUP2226E	130	230	64	3	—	202	153.5	10.8	530	735	3000
N326E	130	280	58	4	181	—	247	18.4	610	720	4300
NJ326E	130	280	58	4	—	236	167	18.4	570	670	2600
NU326E	130	280	58	4	—	236	167	16.2	570	670	2600
NUP326E	130	280	58	4	—	236	167	17	610	720	2600



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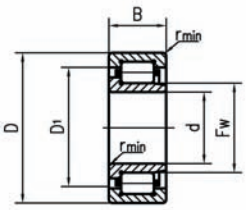

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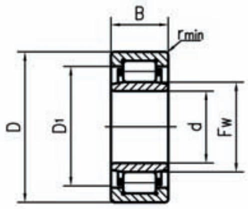

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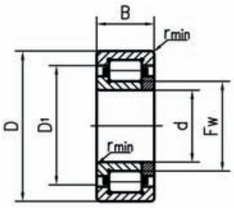

NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
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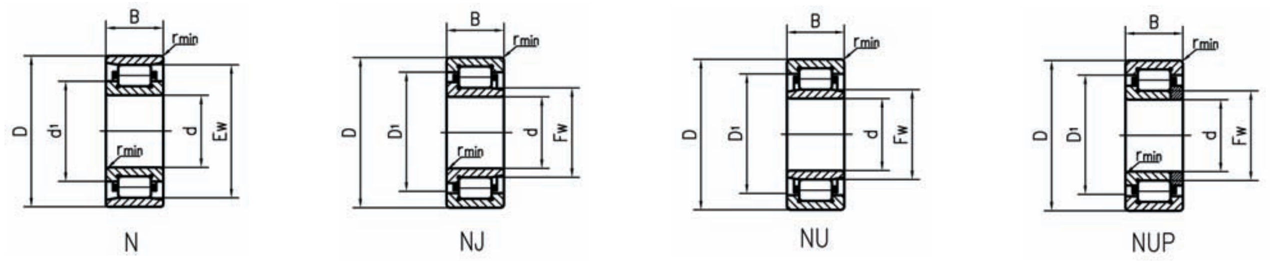
	mm							kg	KN		rpm
NJ2326E	130	280	93	4	—	236	167	29.2	915	1220	3800
NU2326E	130	280	93	4	—	236	167	28.8	915	1220	3800
NUP2326E	130	280	93	4	—	236	167	29.7	915	1220	3800
NU1028M	140	210	33	2	—	185	158	4.09	183	265	5300
NJ228E	140	250	42	3	—	217	169	9.46	390	510	4800
NU228E	140	250	42	3	—	217	169	9.3	390	510	4800
NUP228E	140	250	42	3	—	217	169	9.61	390	510	4800
NJ2228E	140	250	68	3	—	217	169	14.7	570	830	4500
NU2228E	140	250	68	3	—	217	169	14.5	570	830	4500
NUP2228E	140	250	68	3	—	217	169	16.8	570	830	4500
NJ328E	140	300	62	4	—	252	180	20.5	670	800	2400
NU328E	140	300	62	4	—	252	180	20.1	670	800	2400
NUP328E	140	300	62	4	—	252	180	20.8	670	800	2400
NJ2328E	140	300	102	4	—	252	180	36.6	1020	1400	3600
NU2328E	140	300	102	4	—	252	180	36	1020	1400	3600
NUP2328E	140	300	102	4	—	252	180	37.1	1020	1400	3600
NU1030M	150	225	35	2.1	—	198	169.5	4.85	208	310	5000
NJ230E	150	270	45	3	—	234	182	11.9	440	585	4500
NU230E	150	270	45	3	—	234	182	11.8	440	585	4500
NUP230E	150	270	45	3	—	234	182	12.4	440	585	4500
NJ2230E	150	270	73	3	—	234	182	18.7	655	980	4300
NU2230E	150	270	73	3	—	234	182	18.4	655	980	4300
NUP2230E	150	270	73	3	—	234	182	19.3	655	980	4300
NJ330E	150	320	65	4	—	270	193	27.2	765	930	3600
NU330E	150	320	65	4	—	270	193	26.8	765	930	3600
NJ2330E	150	320	108	4	—	270	193	43.8	1160	1600	3200
NU2330E	150	320	108	4	—	270	193	43.2	1160	1600	3200
NUP2330E	150	320	108	4	—	270	193	44.6	1160	1600	3200

N, NJ, NU, NUP Series



Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
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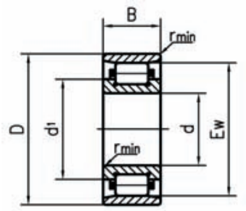
	mm							kg	KN		rpm
NU1032M	160	240	38	2.1	—	211	180	5.92	245	355	4800
N232E	160	290	48	3	206	—	259	14.6	500	670	4300
NJ232E	160	290	48	3	—	250	195	14.8	500	670	4300
NU232E	160	290	48	3	—	250	195	14.6	500	670	4300
NUP232E	160	290	48	3	—	250	195	15.1	500	670	4300
NJ2232E	160	290	80	3	—	252	193	23.5	800	1180	3800
NU2232E	160	290	80	3	—	252	193	23.5	800	1180	3800
NUP2232E	160	290	80	3	—	252	193	24.3	800	1180	3800
NJ332E	160	340	68	4	—	286	204	32.3	865	1060	3000
NU332E	160	340	68	4	—	286	204	31.8	865	1060	3000
NJ2332E	160	340	114	4	—	286	204	52.3	1320	1830	3000
NU2232E	160	340	114	4	—	286	204	51.5	1320	1830	3000
NU1034M	170	260	42	2.1	—	227	193	7.96	300	430	4500
NJ234E	170	310	52	4	—	269	207	18.4	585	780	3600
NU234E	170	310	52	4	—	269	207	18.1	585	780	3600
NUP234E	170	310	52	4	—	269	207	18.6	585	780	3600
NJ2234E	170	310	86	4	—	270	205	35.7	950	1400	3200
NU2234E	170	310	86	4	—	270	205	35.7	950	1400	3200
NUP2234E	170	310	86	4	—	270	205	37.2	950	1400	3200
N334E	170	360	72	4	236	—	318	37.9	965	1220	3000
NJ334E	170	360	72	4	—	303	218	38.6	965	1220	3000
NU334E	170	360	72	4	—	303	218	38	965	1220	3000
NJ2334E	170	360	120	4	—	301	216	62.3	1500	2080	2800
NU2334E	170	360	120	4	—	301	216	61.4	1500	2080	2800
NU1036M	180	280	46	2.1	—	244	205	10.5	360	520	4500
NJ236E	180	320	52	4	—	279	217	16.7	610	830	3600
NU236E	180	320	52	4	—	279	217	18.9	610	830	3600



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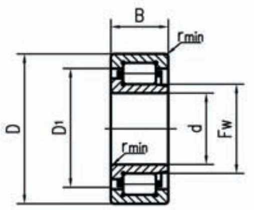

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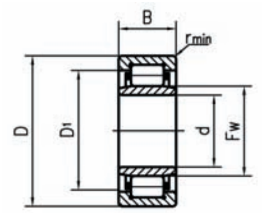

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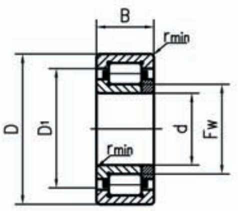

NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
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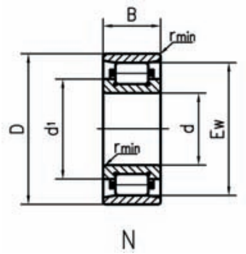
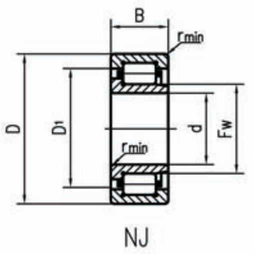
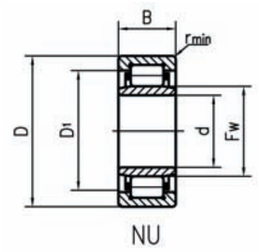
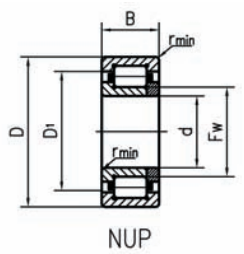
	mm							kg	KN		rpm
NUP236E	180	320	52	4	—	279	217	17.7	610	830	3600
NJ2236E	180	320	86	4	—	280	215	30.9	1000	1500	3200
NU2236E	180	320	86	4	—	280	215	30.5	1000	1500	3200
NUP2236E	180	320	86	4	—	280	215	31.4	1000	1500	3200
NU336E	180	380	75	4	—	319	231	43.9	1040	1320	2800
NU2336E	180	380	126	4	—	320	227	71.5	1660	2320	2800
NU1038ML	190	290	46	2.1	—	254	215	10.9	365	550	4300
NJ238E	190	340	55	4	—	295	230	23.2	680	930	3200
NU238E	190	340	55	4	—	295	230	22.8	680	930	3200
NUP238E	190	340	55	4	—	295	230	23.5	680	930	3200
NU2238E	190	340	92	4	—	297	228	36.9	1100	1660	3000
NU338E	190	400	78	5	—	338	245	50.6	1120	1430	2800
NU2338E	190	400	132	5	—	341	240	82.9	1900	2650	2600
NU1040M	200	310	51	2.1	—	269	229	14.1	400	600	3800
NJ240E	200	360	58	4	—	312	243	31	750	1040	3000
NU240E	200	360	58	4	—	312	243	30.6	750	1040	3000
NUP240E	200	360	58	4	—	312	243	31.4	750	1040	3000
NU2240E	200	360	98	4	—	313	241	45.1	1220	1860	2800
NU340E	200	420	80	5	—	353	258	57.3	1180	1530	2600
NJ2340E	200	420	138	5	—	353	253	97.2	2040	2900	2400
NU2340E	200	420	138	5	—	353	253	95.6	2040	2900	2400
NU1044M	220	340	56	3	—	297	250	20.5	510	765	3200
NJ244E	220	400	65	4	—	344	268	38.7	950	1320	2800
NU244E	220	400	65	4	—	344	268	38.5	950	1320	2800
NUP244E	220	400	65	4	—	344	268	39.3	950	1320	2800
NU2244E	220	400	108	4	—	349	259	61.6	1630	2360	2600









Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
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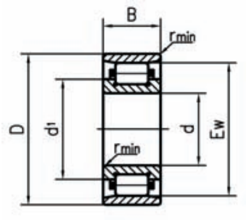
	mm							kg	KN		rpm
NU344E	220	460	88	5	—	371	284	75.5	1430	1900	2400
NJ344M	220	460	88	5	—	371	284	73.5	1430	1900	2400
NU2344E	220	460	145	5	—	384	275	121	2360	3350	2200
NU1048MA	240	360	56	3	—	317	270	20.4	540	850	2600
NU248MA	240	440	72	4	—	365	295	51.7	1140	1600	2600
NJ248MA	240	440	72	4	—	365	295	52.5	1140	1600	2600
NUP248MA	240	440	72	4	—	365	295	51.7	1140	1600	2600
NU2248MA	240	440	120	4	—	365	295	82.8	1830	2800	2400
NJ2248MA	240	440	120	4	—	365	295	82.8	1830	2800	2400
NU348MA	240	500	95	5	—	403	310	95.7	1730	2280	2200
NJ348MA	240	500	95	5	—	403	310	97	1730	2280	2200
NU2348E	240	500	155	5	—	403	299	151	2600	3750	2000
NU1052M	260	400	65	4	—	349	296	29.9	655	1020	2800
NU252MA	260	480	80	5	—	397	320	68.4	1340	1900	2400
NJ252MA	260	480	80	5	—	397	320	70.0	1340	1900	2400
NUP252MA	260	480	80	5	—	397	320	72.0	1340	1900	2400
NU2252MA	260	480	130	5	—	397	320	109	2160	3350	2200
NJ2252MA	260	480	130	5	—	397	320	112	2160	3350	2200
NU352E	260	540	102	6	—	455	337	121	1900	2600	2000
NU1056MA	280	240	65	4	—	369	316	31.4	680	1100	2800
NU256MA	280	500	80	5	—	417	340	72.1	1400	2000	2200
NJ256MA	280	500	80	5	—	417	340	73	1400	2000	2200
NU2256E	280	500	130	5	—	433	327	114	2280	3600	2000
NU2356MA	280	580	175	6	—	467	362	234	3550	5200	1600
NU1060MA	300	460	74	4	—	402	340	46.5	900	1430	2400
NJ1060MA	300	460	74	4	—	402	340	47	900	1430	2400
NU260M	300	540	85	5	—	451	364	90.4	1600	2320	2000



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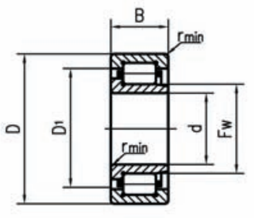

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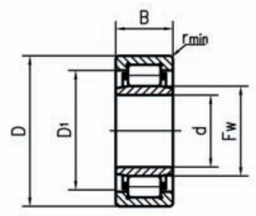

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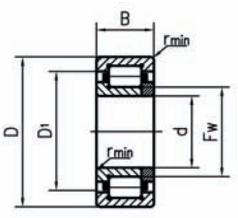
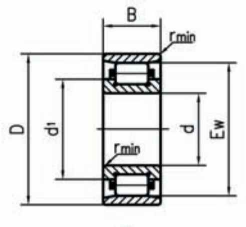


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NU2260MA	300	540	140	5	—	451	364	143	2700	4150	1900
NU1064M	320	480	74	4	—	422	360	48.5	915	1500	1400
NJ1064M1	320	480	74	4	—	422	360	49	915	1500	1400
NU264MA	320	580	92	5	—	485	390	113	1610	2450	1500
NU2264E	320	580	150	5	—	485	380	180	3150	4900	1600
NU1068MA	340	520	82	5	—	455	385	63	1120	1830	1600
NU1072MA	360	540	82	5	—	475	405	66	1140	1900	1600
NU2272MA	360	650	170	6	—	542	437	256	2920	4800	1500
NU1076MA	380	560	82	5	—	495	425	71	1180	2000	1600
NJ1076MA	380	560	82	5	—	495	425	73	1180	2000	1600
NU2276E	380	680	175	6	—	595	451	275	4050	6700	1300
NU1080MA	400	600	90	5	—	527	450	89.8	1370	2320	1400
NU1084MA	420	620	90	5	—	547	470	92.9	1400	2450	1400
NU1088MA	440	650	94	6	—	574	493	104	1560	2750	1300
NU1092MA	460	680	100	6	—	600	516	115	1660	3000	1200
NU1292MA	460	830	165	7.5	—	715	554	415	4180	6800	1100
NU2292MA	460	830	212	7.5	—	706	554	530	5120	8650	1100
NU1096MA	480	700	100	6	—	620	536	134	1700	3100	1200
NU10/500MA	500	720	100	6	—	640	556	133	1760	3200	1100
NU12/500MA	500	920	185	6	—	780	603.1	585	5280	8500	950
NU10/530MA	530	780	112	6	—	692	593	190	2290	4050	1000
NU20/530MA	530	780	145	6	—	704	591	255	3740	7350	1000
NU10/560MA	560	820	115	6	—	726	625	210	2330	4250	1000
NU20/560MA	560	820	150	6	—	741	626	290	3800	7650	1000
NU12/560MA	560	1030	206	6	—	892	668	805	7210	11200	800

N, NJ, NU, NUP Series



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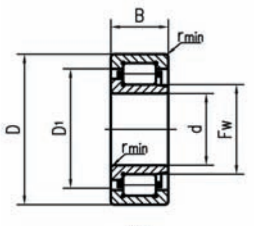

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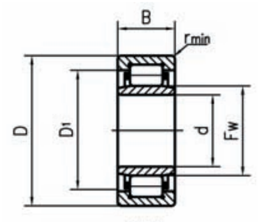

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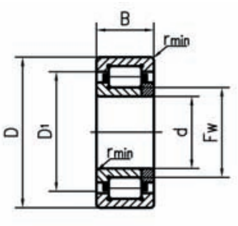
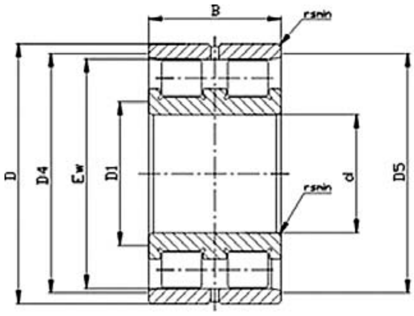


NUP

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting Speed
	d	D	B	rsmin	d1	D1	Fw, Ew		DYN. Cr	STAT. Cor	
	mm							kg	KN		rpm
NU10/600M1	600	870	118	6	—	779	667	245	2750	5100	900
NU20/600M1	600	870	155	6	—	793	661	325	4180	8000	900
NU12/600M1	600	1090	155	9.5	—	935	749	710	5610	9800	850
NU10/630M1	630	920	128	7.5	—	837	702	285	3410	6200	1000
NU20/630M1	630	920	170	7.5	—	832	699	400	4730	9500	850
NU12/630M1	630	1150	230	12	—	1005	751	1100	8580	13700	700
NU10/670M1	670	980	136	7.5	—	891	747	350	3740	6800	800
NU20/670M1	670	980	180	7.5	—	890	746	480	5390	11000	800
NU10/710M1	710	1030	140	7.5	—	939	778	415	4680	8500	7500

Cylindrical Roller Bearings

NN Series



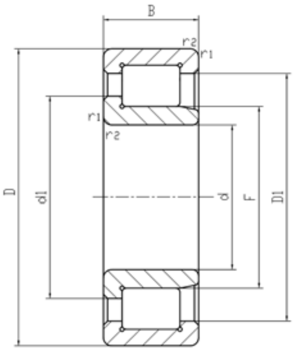
NN

Technical Parameters:

Bearing Code	Dimensions						Basic Load Ratings		Limiting speed		Mass
	d	D	B	rsmin	D1	E	Cr KN	Cor KN	grease	oil	
	mm						KN		rpm		kg
NN3006ASK	30	55	19	1	35	48.5	29	34	16000	19000	0.191
NN3007ASK	35	62	20	1	40	55	35.5	44	14000	17000	0.249
NN3008ASK	40	68	21	1	45	61	45	58.5	12000	15000	0.303
NN3009ASK	45	75	23	1	50	67.5	54	72	11000	14000	0.393
NN3010ASK	50	80	23	1	55	72.5	57	80	10000	13000	0.426
NN3011ASK	55	90	26	1.1	61	81	72	100	9000	11000	0.63
NN3012ASK	60	95	26	1.1	66	86.1	75	110	8500	10000	0.674
NN3013ASK	65	100	26	1.1	71	91	76.5	116	8000	9500	0.715
NN3014ASK	70	110	30	1.1	76	100	98	150	7000	8500	1.04
NN3015ASK	75	115	30	1.1	81	105	100	156	6700	8000	1.09
NN3016ASK	80	125	34	1.1	86	113	120	186	6300	7500	1.51
NN3017ASK	85	130	34	1.1	91	118	125	200	6000	7000	1.58
NN3018ASK	90	140	37	1.5	98	127	140	224	5600	6700	2.05
NN3019ASK	95	145	37	1.5	103	132	143	236	5300	6300	2.14
NN3020ASK	100	150	37	1.5	108	137	146	245	5300	6300	2.23
NN3021ASK	105	160	41	2	114	146	190	310	4800	5600	2.84
NN3022ASK	110	170	45	2	119	155	220	360	4500	5300	3.61
NN3024ASK	120	180	46	2	129	165	232	390	4300	5000	3.94
NN3026ASK	130	200	52	2	139	182	290	500	3800	4500	5.79
NN3028ASK	140	210	53	2	149	192	300	520	3600	4300	6.22
NN3030ASK	150	225	56	2.1	160	206	335	585	3400	4000	7.58
NN3032ASK	160	240	60	2.1	170	219	375	670	3200	3800	9.23
NN3034ASK	170	260	67	2.1	180	236	450	800	3000	3600	12.5
NN3036ASK	180	280	74	2.1	190	255	570	1000	2800	3400	16.4
NN3038ASK	190	290	75	2.1	200	265	585	1040	2600	3200	17.3
NN3040ASK	200	310	82	2.1	210	282	655	1200	2400	3000	22.2
NN3044ASK	220	340	90	3	232	310	800	1460	2200	2800	29.1
NN3048ASK	240	360	92	3	252	330	850	1560	2000	2600	31.6
NN3052ASK	260	400	104	4	275	364	1060	2000	1900	2400	46.2
NN3056ASK	280	420	106	4	295	384	1080	2080	1800	2200	49.7
NN3060ASK	300	460	118	4	315	418	1270	2400	1600	1900	68.8
NN3064ASK	320	480	121	4	335	438	1320	2600	1600	1900	74.2
NN3068ASK	340	520	133	5	357	473	1630	3250	1400	1700	99.3
NN3072ASK	360	540	134	5	377	493	1660	3350	1400	1700	104
NN3076ASK	380	560	135	5	397	513	1700	3450	1300	1600	110
NN3080ASK	400	600	148	5	417	549	2160	4500	1200	1500	143

Cylindrical Roller Bearings

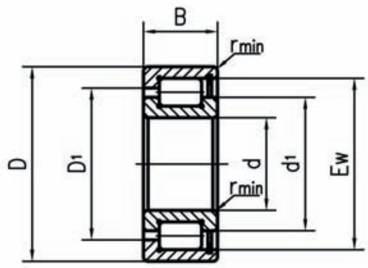
NJ/NCF-V Series



NJG—VH

Technical Parameters:

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting speed
	d	D	B	rsmin	d1	D1	Ew, Fw		Cr$_{KN}$	Cor$_{KN}$	
	mm							kg	KN		rpm
NJG2317VH	85	180	60	3	118	149	107	7.40	480	600	1800
NJG2318VH	90	190	64	3	117.5	152	105.26	8.75	520	655	1800
NJG2320VH	100	215	73	3	136	176	122.82	13.0	655	830	1600
NJG2322VH	110	240	80	3	151	198	134.3	17.5	830	1060	1400
NCF2924CV	120	165	27	1.1	136	149	154.3	1.73	172	290	2200
NCF3024CV	120	180	46	2	139	160	167.6	3.8	290	430	1600
NJG2324VH	120	260	86	3	164.5	212.5	147.4	22.4	950	1220	1200
NCF2926CV	130	180	30	1.5	147	161	167.1	2.36	204	360	1600
NCF3026CV	130	200	52	1	149	175	183	5.8	413	620	1500
NJG2326VH	130	280	93	4	175	226	157.9	28.1	1100	1430	1000
NCF2928CV	140	190	30	1.5	158	173	180	2.48	212	380	1500
NCF3028CV	140	210	53	1	163	189	197	6.05	440	680	1300
NJG2328VH	140	300	102	4	187	241	168.45	35.5	1250	1630	1300
NCF2930CV	150	210	36	2	169	189	196.4	3.92	290	500	1300
NCF3030CV	150	225	56	1.1	170	198	206	7.35	455	710	1200
NJG2330VH	150	320	108	4	202	261	182.5	42.5	1500	2000	900
NCF2932CV	160	220	36	2	180	200	207.2	4.30	300	540	1200
NCF3032CV	160	240	60	1.1	185	215	224.8	9.10	520	800	1100
NCF2934CV	170	230	36	2	191	210.5	218	4.30	310	570	1100
NCF3034CV	170	260	67	1.1	198	232	242.9	12.5	670	1060	1000
NJG2334VH	170	360	120	4	225	294	203.55	59.5	1760	2400	800
NCF2936CV	180	250	42	2	203	223	231.5	6.20	390	695	1000
NCF3036CV	180	280	74	2.1	212	248	260.2	16.5	780	1250	900
NCF2938CV	190	260	42	2	212	236	243.5	6.50	405	735	950
NCF3038CV	190	290	75	2.1	222	258	269.8	17	800	1290	850
NJG2338VH	190	400	132	5	250	320	224.43	80.3	2080	2900	700
NCF2940CV	200	280	48	2.1	226.5	253	262	9.10	490	915	850
NCF3040CV	200	310	82	2.1	237	275	287.8	21.5	915	1530	800
NJG2340VH	200	420	138	5	266	342	238.65	92	2320	3250	670



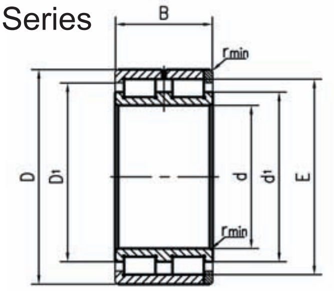
NCF–CV

Technical Parameters:

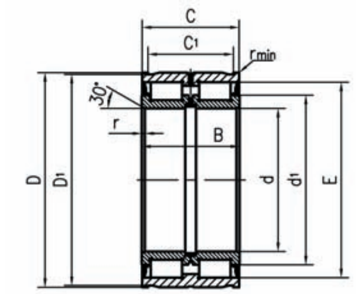
Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting speed
	d	D	B	rsmin	d1	D1	Ew, Fw		CrKN	CorKN	
	mm							kg	KN		rpm
NCF2944CV	220	300	48	2.1	247	274	282.5	9.9	520	1000	800
NCF3044CV	220	340	90	3	255	298	312	29.5	1080	1800	800
NJG2344VH	220	460	145	5	295	383	266.7	111	2650	3800	600
NCF2948CV	240	320	48	2.1	267	294	303	10.6	540	1080	700
NCF3048CV	240	360	92	3	278	321	335	32.0	1140	1960	800
NCF2952CV	260	360	60	2.1	294	321	333.7	18.5	750	1430	670
NCF3052CV	260	400	104	4	304	358	376.1	46.5	1560	2600	600
NCF2956CV	280	380	60	2.1	314	347.5	359.1	19.7	880	1730	600
NCF3056CV	280	420	106	4	319	373	391	50.0	1630	2750	560
NCF2960CV	300	420	72	3	341.5	375	390.5	31.2	1120	2200	560
NCF3060CV	300	460	118	4	355	413	433	69	1900	3250	600
NCF2964CV	320	440	72	3	359	401	411	32.9	1160	2360	530
NCF3064CV	320	480	121	4	368	434	449	74.5	1980	3450	560
NCF2968CV	340	460	72	3	378.5	421	431	35.0	1200	2500	500
NCF3068CV	340	520	133	5	395	468	485	100	2380	4150	530
NCF2972CV	360	480	72	3	404	436.5	451.5	36.5	1220	2600	480
NCF2976CV	380	520	82	4	427.5	473.5	488	52.6	1460	3100	450
NCF2980CV	400	540	82	4	449	499	511	54.5	1500	3250	450
NCF2984CV	420	560	82	4	462	512	524	57.0	1530	3400	430
NCF2988CV	440	600	95	4	502	545	565.5	80.5	2000	4400	400

Cylindrical Roller Bearings

NNC-CV/NNF-V Series



NNC–CV



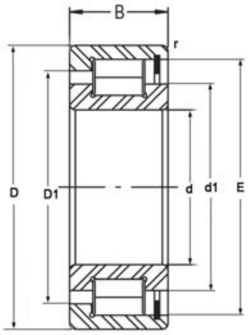
NNF–V

Technical Parameters:

Bearing Code	Dimensions									Mass	Basic Load Ratings		Limiting Speed
	d	D	B	C	rsmin	d1	D1	C1	E		Cr	Cor	
	mm									kg	KN		rpm
NNF 5024 ADA–2LSV	120	180	80	79	0.6	141	176	71.2	164	6.90	400	750	480
NNC4924CV	120	165	45	—	1.1	139	—	—	153.55	2.95	242	480	1700
NNF 5026 ADA–2LSV	130	200	95	94	0.6	155	196	83.2	183.5	10.5	610	1040	450
NNC4926CV	130	180	50	—	1.5	149	—	—	165.4	3.95	255	530	1600
NNF 5028 ADA–2LSV	140	210	95	94	0.6	167	206	83.2	195.5	11.0	600	1120	400
NNC4928CV	140	190	50	—	1.5	160	—	—	175.9	4.2	265	570	1400
NNF 5030 ADA–2LSV	150	225	100	99	0.6	177	221	87.2	209	13.5	695	1290	380
NNC4930CV	150	210	60	—	2	171	—	—	192.77	6.65	380	850	1300
NNF 5032 ADA–2LSV	160	240	109	108	0.6	191	236	95.2	222.55	16.5	720	1400	360
NNC4932CV	160	220	60	—	2	184	—	—	206.16	7.0	446	915	1300
NNF 5034 ADA–2LSV	170	260	122	121	0.6	203	254	107.2	239	22.5	720	1400	360
NNC4934CV	170	230	60	—	2	193	—	—	215.08	7.35	457	950	1200
NNF 5036 ADA–2LSV	180	280	136	135	0.6	220	274	118.2	259	30.0	1100	2100	300
NNC4936CV	180	250	69	—	2	205	—	—	230.5	10.8	594	1220	1100
NNF 5038 ADA–2LSV	190	290	136	135	0.6	228	284	118.2	267.25	31.5	1370	2600	300
NNC4938CV	190	260	69	—	2	215	—	—	240.7	11.2	605	1290	1100
NNF 5040 ADA–2LSV	200	310	150	149	0.6	245	304	128.2	284	42.0	1400	2900	280
NNC4940CV	200	280	80	—	2.1	230	—	—	259.34	15.8	704	1500	1000
NNF 5044 ADA–2LSV	220	340	160	159	1	264	334	138.2	308.5	53.5	1610	3100	315
NNC4944CV	220	300	80	—	2.1	248	—	—	276.52	17.2	737	1600	950
NNF 5048 ADA–2LSV	240	360	160	159	1	283	354	138.2	327.5	57.5	1680	3350	340
NNC4948CV	240	320	80	—	2.1	270	—	—	299.46	18.5	781	1760	850

Cylindrical Roller Bearings

SL1818 Series



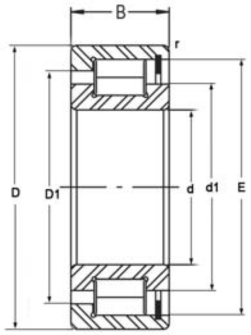
SL18

Technical Parameters:

Bearing Code	Dimensions								Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	E	s	r_{min}	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
									Cr	Cor	Cur	n_G	n_B	
	mm								KN			rpm		kg
SL181840	200	250	24	216.6	231.6	237.6	2	1.5	183	330	33.5	1400	1040	2.57
SL181844	220	270	24	237.3	252.3	258.5	2	1.5	192	365	36	1320	940	2.8
SL181848–E	240	300	28	260.5	281	287.5	2	2	265	490	51	1200	870	4.29
SL181852–E	260	320	28	281	301.5	308	2	2	275	530	54	1110	790	4.61
SL181856–E	280	350	33	304	327	335	2.5	2	355	670	69	1030	730	6.89
SL181860–E	300	380	38	323.5	350.5	360	3	2.1	455	840	86	950	680	9.79
SL181864–E	320	400	38	344.5	371.5	381	3	2.1	470	900	90	900	620	10.36
SL181868–E	340	420	38	365.5	392.5	402.2	3	2.1	485	960	94	850	570	10.93
SL181872–E	360	440	38	387	413.5	423.5	3	2.1	500	1010	98	810	530	11.49
SL181876–E	380	480	46	415.5	448	459	4	2.1	650	1290	126	750	490	18.87
SL181880–E	400	500	46	432	464.5	475.5	4	2.1	660	1340	130	720	470	19.81
SL181884–E	420	520	46	457	489.5	500	4	2.1	680	1420	135	690	430	20.6
SL181888–E	440	540	46	473.5	506	517	4	2.1	700	1470	139	660	415	21.54
SL181892–E	460	580	56	501.5	541	554	5	3	940	1890	179	620	385	33.21
SL181896–E	480	600	56	522	561	574.5	5	3	960	1970	185	600	365	34.53
SL1818/500–E	500	620	56	542	581.5	594.5	5	3	980	2050	190	580	345	35.73

Cylindrical Roller Bearings

SL1822 Series

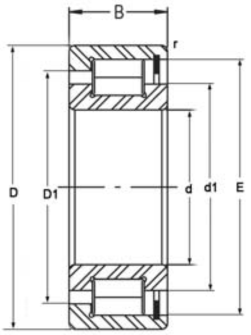


SL18

Technical Parameters:

Bearing Code	Dimensions								Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	E	s	r_{min}	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
									Cr	Cor	Cur	n_G	n_B	
	mm								KN			rpm		kg
SL182204	20	47	18	30.3	36.9	41.47	1	1	45.5	37	6.1	9700	6500	0.16
SL182205	25	52	18	35.5	41.9	46.52	1	1	51	45	7.4	8400	5500	0.18
SL182206	30	62	20	42	50.6	55.19	1	1	70	64	10.2	7000	4550	0.3
SL182207	35	72	23	47	59.3	63.97	1	1.1	88	78	12.7	6100	4250	0.44
SL182208	40	80	23	54	66.3	70.94	1	1.1	97	91	14.9	5400	3650	0.55
SL182209	45	85	23	57.5	69.8	74.43	1	1.1	101	98	16	5100	3450	0.59
SL182210	50	90	23	64.4	76.7	81.4	1	1.1	109	111	18.1	4600	3000	0.64
SL182211	55	100	25	70	84.1	88.81	1	1.5	140	148	25	4200	2700	0.87
SL182212	60	110	28	76.8	93.9	99.17	1.5	1.5	169	176	31	3800	2550	1.18
SL182213	65	120	31	82.3	100.7	106.25	1.5	1.5	198	210	37	3550	2480	1.57
SL182214	70	125	31	87	105.2	111.45	1.5	1.5	181	223	32	3350	2340	1.66
SL182215	75	130	31	91.8	110	116.2	1.5	1.5	187	236	33.5	3200	2210	1.75
SL182216	80	140	33	98.6	119.3	126.3	1.5	2	223	280	38.5	3000	2040	2.15
SL182217	85	150	36	104.4	126.3	133.75	1.5	2	255	320	44.5	2800	2000	2.74
SL182218	90	160	40	110.2	133.3	141.15	2.5	2	285	365	51	2650	1990	3.48
SL182219	95	170	43	122	147.3	155.95	2.5	2.1	330	425	58	2410	1780	4.17
SL182220	100	180	46	127.5	154.3	163.35	2.5	2.1	390	510	70	2300	1700	5.13
SL182222	110	200	53	137	168	177.6	4	2.1	450	580	78	2130	1720	7.24
SL182224	120	215	58	150.7	183	192.9	4	2.1	530	720	95	1950	1500	9.08
SL182226	130	230	64	162.3	197	207.75	5	3	620	850	110	1810	1360	11.25
SL182228	140	250	68	173.9	211.1	222.55	5	3	720	1000	127	1690	1230	14.47
SL182230	150	270	73	185.5	225.2	237.35	6	3	820	1160	147	1580	1130	18.43
SL182232	160	290	80	208.7	253.4	267.1	6	3	1020	1470	178	1410	920	23
SL182234	170	310	86	220.3	267.4	281.9	7	4	1140	1660	199	1330	870	28.65
SL182236	180	320	86	232.4	279.5	294	7	4	1180	1760	208	1270	800	29.8
SL182238	190	340	92	243.5	295.5	311.5	9	4	1300	1900	223	1210	770	35.65
SL182240	200	360	98	246.6	302.4	319.4	9	4	1410	2010	235	1180	770	43.12

SL1829 Series



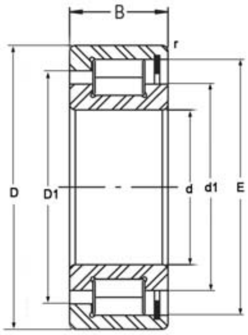
SL18

Technical Parameters:

Bearing Code	Dimensions								Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	E	s	r_{min}	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
									Cr	Cor	Cur	n_G	n_B	
	mm								KN			rpm		kg
SL182912	60	85	16	69	74.4	78.55	1	1	63	76	13.7	4550	2900	0.29
SL182913	65	90	16	75.7	81	85.24	1	1	67	84	15.1	4150	2550	0.31
SL182914	70	100	19	81.2	87.8	92.31	1	1	88	111	18.8	3850	2550	0.49
SL182915	75	105	19	86.3	92.8	97.41	1	1	91	119	20.1	3600	2370	0.52
SL182916	80	110	19	91.4	98	102.51	1	1	94	1260	21.4	3450	2220	0.55
SL182917	85	120	22	96.4	105	109.58	1	1.1	118	159	25.5	3200	2200	0.81
SL182918	90	125	22	102	110.7	115.75	1	1.1	122	169	26.5	3050	2050	0.84
SL182919	95	130	22	106.7	117	122.25	1	1.1	132	177	27.5	2900	1940	0.86
SL182920	100	140	24	113.4	125.7	130.95	1.5	1.1	152	203	31.5	2700	1870	1.14
SL182922	110	150	24	124	136.2	141.5	1.5	1.1	155	213	34	2490	1710	1.23
SL182924	120	165	27	134.8	149	154.3	1.5	1.1	199	285	45.5	2290	1590	1.73
SL182926	130	180	30	146	161.1	167.15	2	1.5	238	350	54	2110	1500	2.33
SL182928	140	190	30	157	174	180	2	1.5	260	375	57	1960	1370	2.42
SL182930	150	210	36	169	189.6	196.75	2.5	2	340	480	73	1810	1360	3.77
SL182932	160	220	36	179.7	200.5	207.6	2.5	2	350	510	77	1710	1270	4
SL182934	170	230	36	190.6	211.3	218.45	2.5	2	365	540	80	1610	1190	4.3
SL182936	180	250	42	200.7	224	231.85	2.5	2	455	680	100	1530	1150	6.2
SL182938	190	260	42	211.5	238.5	244.15	2	2	510	770	112	1450	1030	6.5
SL182940	200	280	48	225.5	252.4	261.6	3	2.1	610	940	134	1360	950	9.1
SL182944	220	300	48	246.3	273.2	282.45	3	2.1	650	1030	144	1250	840	9.9
SL182948	240	320	48	267.5	294.4	303.7	3	2.1	600	1120	124	1150	750	10.6
SL182952	260	360	60	291.5	323.4	333.7	5	2.1	780	1450	160	1060	690	18.5
SL182956	280	380	60	314	348.5	359.5	3.5	2.1	910	1710	184	980	590	19.7
SL182960	300	420	72	338	376.9	389.45	5	3	1170	2200	235	910	540	31.2
SL182964	320	440	72	358.5	397.4	409.85	5	3	1210	2340	246	860	495	32.9
SL182968	340	460	72	379	418.7	430.2	5	3	1250	2470	255	810	460	34.7
SL182972	360	480	72	399.5	438.6	450.6	5	3	1280	2600	265	770	430	36.4
SL182976	380	520	82	426	472.1	486.7	5	4	1660	3300	335	720	380	52.1
SL182980	400	540	82	450	496.1	510.85	5	4	1710	3500	350	690	350	54.3
SL182984	420	560	82	462	509	522.95	5	4	1730	3600	355	670	340	56.9
SL182988	440	600	95	490	544.6	562	7	4	2090	4100	4050	630	325	78.1
SL182992	460	620	95	504	559.6	576.3	7	4	2130	4250	410	610	310	81.1
SL182996	480	650	100	538	596.6	614.75	7	5	2390	4800	460	570	280	94.7
SL1829/500	500	670	100	553	612.7	630	7	5	2430	4950	470	560	270	98.3

Cylindrical Roller Bearings

SL1830 Series



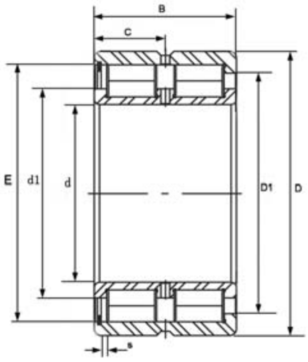
SL18

Technical Parameters:

Bearing Code	Dimensions								Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	E	s	r_{min}	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
									Cr	Cor	Cur	n_G	n_B	
	mm								KN			rpm		kg
SL183004	20	42	16	28.8	32.8	36.81	1.5	0.6	30.5	26.5	4.45	10500	7500	0.11
SL183005	25	47	16	34.6	38.5	42.51	1.5	0.6	35	32	5.5	8900	6000	0.12
SL183006	30	55	19	40	45.4	49.6	2	1	45	43	7.5	7600	5600	0.2
SL183007	35	62	20	44.9	51.3	55.52	2	1	55	55	9.4	6700	4950	0.26
SL183008	40	68	21	50.5	57.1	61.74	2	1	66	68	11.2	6000	4350	0.31
SL183009	45	75	23	55.3	62.2	66.85	2	1	70	76	12.5	5500	4200	0.4
SL183010	50	80	23	59.1	67.7	72.33	2	1	88	96	15.1	5100	3700	0.43
SL183011	55	90	26	68.5	78.8	83.54	2	1.1	120	136	22.6	4400	3100	0.64
SL183012	60	95	26	71.7	82.1	86.74	2	1.1	123	145	23.7	4200	3000	0.69
SL183013	65	100	26	78.1	88.4	93.09	2	1.1	130	159	26	3900	2700	0.73
SL183014	70	110	30	81.5	95.6	100.28	3	1.1	153	176	29.5	3650	2800	1.02
SL183015	75	115	30	89	103.2	107.9	3	1.1	162	194	32.5	3400	2490	1.06
SL183016	80	125	34	95	111.7	117.4	4	1.1	173	225	31	3150	2470	1.43
SL183017	85	130	34	99.4	116.1	121.95	4	1.1	178	237	32	3000	2360	1.51
SL183018	90	140	37	106.1	124.5	130.11	4	1.5	208	280	38	2800	2240	1.97
SL183020	100	150	37	115.7	134	140.2	4	1.5	219	310	40.5	2600	2040	2.15
SL183022	110	170	45	127.3	149.3	156.7	5.5	2	285	395	52	2310	2010	3.5
SL183024	120	180	46	138.8	160.7	168.15	5.5	2	300	435	56	2160	1840	3.8
SL183026	130	200	52	148.6	175.5	184.4	5.5	2	435	620	79	1960	1660	5.65
SL183028	140	210	53	162.2	189.5	198.4	5.5	2	455	680	85	1850	1470	6.04
SL183030	150	225	56	170	198	207.45	7	2.1	480	710	88	1730	1430	7.33
SL183032	160	240	60	184.8	215.8	225.45	7	2.1	550	820	99	1620	1280	8.8
SL183034	170	260	67	198.1	232.7	243.55	7	2.1	710	1070	129	1510	1120	12.2
SL183036	180	280	74	212.2	249.4	261	7	2.1	820	1260	150	1410	1020	16.1
SL183038	190	290	75	221.8	259	270.6	9	2.1	840	1320	155	1350	970	17
SL183040	200	310	82	236.6	276.2	288.6	9	2.1	960	1530	178	1270	890	21.8
SL183044	220	340	90	254.6	299.2	312	9	3	1160	1840	209	1160	800	28.4
SL183048	240	360	92	277.5	322.1	336	11	3	1220	2010	224	1080	720	30.9
SL183052	260	400	104	304	358.4	375.97	11	4	1620	2550	280	980	620	44.5
SL183056	280	420	106	319.5	372.9	390.3	11	4	1670	2700	290	930	590	48
SL183060–TB	300	460	118	353.6	415.6	434.85	14	4	2040	3350	325	850	500	66.6
SL183064–TB	320	480	121	369.5	430.1	449.5	14	4	2100	3500	340	810	480	71.7
SL183068–TB	340	520	133	396.1	463.9	485.65	16	5	2500	4150	400	750	430	95.8
SL183072–TB	360	540	134	414	481.6	503.45	16	5	2550	4350	410	720	405	101
SL183076–TB	380	560	135	431.7	499.5	521.25	16	5	2600	4500	425	690	390	106
SL183080–TB	400	600	148	462.5	535.1	558.52	18	5	3100	5400	500	650	345	140

Cylindrical Roller Bearings

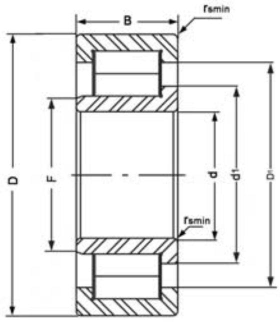
SL1850 Series



Technical Parameters:

Bearing Code	Dimensions									Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	E	C	s	r_{min}	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
										Cr	Cor	Cur	n_G	n_B	
	mm									KN			rpm		kg
SL185004	20	42	30	28.4	33.3	36.81	15	1	0.6	53	52	8.9	10500	7400	0.2
SL185005	25	47	30	34.5	39	42.51	15	1	0.6	60	64	11.1	8900	6000	0.23
SL185006	30	55	34	40	45.3	49.6	17	1.5	1	78	84	15	7600	5300	0.35
SL185007	35	62	36	44.9	51.2	55.52	18	1.5	1	85	109	18.8	6700	4750	0.46
SL185008	40	68	38	50.5	57.2	61.74	19	1.5	1	101	136	22.4	6000	4200	0.56
SL185009	45	75	40	55.3	62.6	66.85	20	1.5	1	120	151	24.9	5500	3950	0.71
SL185010	50	80	40	59.1	67.6	72.33	20	1.5	1	131	191	30	5100	3450	0.76
SL185011	55	90	46	68.5	78.7	83.54	23	1.5	1.1	206	275	45	4400	2900	1.16
SL185012	60	95	46	71.7	81.9	86.74	23	1.5	1.1	212	290	47.5	4200	2800	1.24
SL185013	65	100	46	78.1	88.3	93.09	23	1.5	1.1	223	320	52	3900	2500	1.32
SL185014	70	110	54	81.5	95.7	100.28	27	3	1.1	265	355	59	3650	2650	1.85
SL185015	75	115	54	89	102.9	107.9	27	3	1.1	275	390	65	3400	2370	1.93
SL185016	80	125	60	95	111.7	117.4	30	3.5	1.1	295	450	62	3150	2320	2.59
SL185017	85	130	60	99	116.1	121.95	30	3.5	1.1	305	475	64	3000	2210	2.72
SL185018	90	140	67	106.1	124.5	130.65	33.5	4	1.5	355	560	76	2800	2140	3.62
SL185020	100	150	67	115.7	134	140.2	33.5	4	1.5	375	620	81	2600	1930	3.94
SL185022	110	170	80	127.3	149.3	156.7	40	5	2	490	790	104	2350	1730	6.32
SL185024	120	180	80	138.8	160.7	168.15	40	5	2	520	870	111	2170	1530	6.77
SL185026	130	200	95	148.6	175.5	184.4	47.5	5	2	740	1230	158	2000	1340	10.2
SL185028	140	210	95	162.6	189.5	198.4	47.5	5	2	780	1360	169	1840	1180	11.1
SL185030	150	225	100	170	198	207.45	50	6	2	810	1390	175	1760	1150	13.3
SL185032	160	240	109	184.8	215.8	224.8	54.5	6	2.1	930	1610	199	1620	1030	12.2
SL185034	170	260	122	198	332.7	242.85	61	6	2.1	1200	2110	260	1510	900	22.5
SL185036	180	280	136	212.2	249.4	260.22	68	8	2.1	1390	2480	300	1410	820	29.9
SL185038	190	290	136	221.8	259	269.76	68	8.2	2.1	1430	2600	310	1350	770	31.3
SL185040	200	310	150	236.6	276.2	287.75	75	8.9	2.1	1630	3000	355	1270	710	40.4
SL185044	220	340	160	254.6	297.8	312.2	80	9	3	1980	3650	420	1170	630	51.6
SL185048	240	360	160	277.5	322.1	335.1	80	9	3	2080	4000	445	1080	550	55.2
SL185052	260	400	190	304	359.7	375.97	95	11.3	4	2750	5000	560	980	490	82.6
SL185056	280	420	190	318.3	374.1	390.3	95	11.3	4	2850	5300	580	940	460	88
SL185060–TB	300	460	218	353.6	413.6	433.6	109	12.5	4	3450	6600	650	840	395	124
SL185064–TB	320	480	218	369.5	431.5	449.5	109	12.5	4	3550	6900	680	810	375	128.4
SL185068–TB	340	520	243	396	465.5	485.65	121.5	14.3	5	4250	8300	800	750	355	178
SL185072–TB	360	540	243	413.8	481	503.45	121.5	14	5	4400	8700	820	720	320	178
SL185076–TB	380	560	243	432	499	521.25	121.5	14.1	5	4450	8900	850	700	305	196.5

SL1923 Series



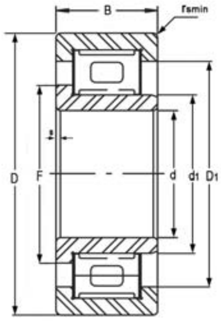
SL19

Technical Parameters:

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting speed
	d	D	B	d1	D1	F	Rmin		Cr	Cor	
	mm							kg	KN		rpm
SL192305	25	62	24	36.7	47.5	31.72	1.1	0.37	73	60	7400
SL192306	30	72	27	43.5	56	38.3	1.1	0.56	100	88	6400
SL192307	35	80	31	50.7	65.8	44.68	1.5	0.74	126	112	5600
SL192308	40	90	33	57.5	75.2	51.12	1.5	1.01	170	156	5000
SL192309	45	100	36	62.5	80.3	56.1	1.5	1.37	181	169	4450
SL192310	50	110	40	68.3	89.7	60.72	2	1.81	232	219	4050
SL192311	55	120	43	75.5	99.3	67.11	2	2.28	270	255	3700
SL192312	60	130	46	82	105.8	73.62	2.1	2.88	285	280	3400
SL192313	65	140	48	90	116.5	80.69	2.1	3.52	350	355	3150
SL192314	70	150	51	93.5	121.6	84.14	2.1	4.33	385	390	2950
SL192315	75	160	55	101.6	131.5	91.22	2.1	5.3	460	475	2750
SL192316	80	170	58	109.5	142.1	98.24	2.1	6.23	540	560	2600
SL192317	85	180	60	118.2	150.9	107.01	3	7.34	570	620	2450
SL192318	90	190	64	117.5	152.5	105.26	3	8.83	620	660	2310
SL192319	95	200	67	126.6	161.9	114.65	3	10.2	650	720	2200
SL192320	100	215	73	132.7	172.8	119.3	3	13	790	860	2060
SL192322	110	240	80	151.1	199.9	134.27	3	17	950	980	1850
SL192324	120	260	86	164.2	213.1	147.39	3	22.3	1130	1240	1710

Cylindrical Roller Bearings

ZSL1923 Series



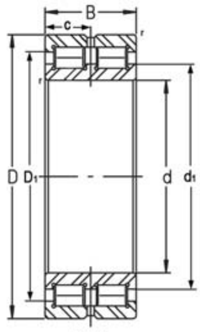
ZSL19

Technical Parameters:

Bearing Code	Dimensions							Mass	Basic Load Ratings		Limiting speed
	d	D	B	d1	D1	F	Rmin		Cr	Cor	
	mm							kg	KN		rpm
ZSL192305	25	62	24	36.7	47.5	31.72	1.1	0.36	68	55	16100
ZSL192306	30	72	27	43.5	56	38.3	1.1	0.55	94	81	13700
ZSL192307	35	80	31	50.7	65.8	44.68	1.5	0.72	118	104	12200
ZSL192308	40	90	33	57.5	75.2	51.12	1.5	1	160	144	10800
ZSL192309	45	100	36	62.5	80.3	56.1	1.5	1.34	171	160	9700
ZSL192310	50	110	40	68.3	89.7	60.72	2	1.76	219	202	8800
ZSL192311	55	120	43	75.5	99.3	67.11	2	2.22	255	236	8000
ZSL192312	60	130	46	82	105.8	73.62	2.1	2.82	270	260	7400
ZSL192313	65	140	48	90	116.5	80.69	2.1	3.44	335	330	6800
ZSL192314	70	150	51	93.5	121.6	84.14	2.1	4.27	365	365	6400
ZSL192315	75	160	55	101.6	131.9	91.22	2.1	5.2	435	440	6000
ZSL192316	80	170	58	109.5	142.1	98.24	2.1	6.2	510	520	5600
ZSL192317	85	180	60	118.5	150.9	107.01	3	7.23	540	570	5300
ZSL192318	90	190	64	117.5	152.5	105.26	3	8.7	590	610	5000
ZSL192319	95	200	67	126.6	161.9	114.65	3	10	620	670	4750
ZSL192320	100	215	73	132.7	172.8	119.3	3	12.7	750	790	4500
ZSL192322	110	240	80	151.1	199.9	134.27	3	16.5	890	900	3950
ZSL192324	120	260	86	164.2	213.1	147.39	3	21.9	1060	1140	3700

Cylindrical Roller Bearings

SL0148 Series



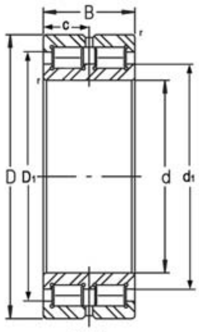
SL01

Technical Parameters:

Bearing Code	Dimensions							Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	C	r	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
								Cr	Cor	Cur	n_G	n_B	
	mm							KN			rpm		kg
SL01 4830	150	190	40	165.1	174.2	20	1.1	237	550	61	1900	1300	2.9
SL01 4832	160	200	40	173.7	182.8	20	1.1	243	580	63	1800	1300	3.1
SL01 4834	170	215	45	186.3	197	22.5	1.1	265	620	66	1680	1200	4.1
SL01 4836	180	225	45	199.1	209.8	22.5	1.1	275	660	70	1600	1100	4.3
SL01 4838	190	240	50	207.6	220.7	25	1.5	315	750	77	1510	1100	5.65
SL01 4840	200	250	50	218.1	231.2	25	1.5	325	790	80	1440	1000	5.9
SL01 4844	220	270	50	239.1	252.3	25	1.5	340	870	85	1300	850	6.4
SL01 4848	240	300	60	259.5	276.7	30	2	520	1290	120	1200	750	10
SL01 4852	260	320	60	281.8	298.8	30	2	540	1400	128	1120	700	11
SL01 4856	280	350	69	306.8	326.4	34.5	2	710	1860	163	1030	600	16
SL01 4860	300	380	80	327.9	349.9	40	2.1	830	2120	185	950	550	23
SL01 4864	320	400	80	350.9	372.9	40	2.1	860	2280	194	900	500	24
SL01 4868	340	420	80	368.1	390.1	40	2.1	880	2390	201	850	480	25.5
SL01 4872	360	440	80	391	413.2	40	2.1	910	2550	210	800	440	27
SL01 4876	380	480	100	419	447.2	50	2.1	1330	3550	290	750	400	45.5
SL01 4880	400	500	100	433.8	462	50	2.1	1360	3700	295	720	380	46.5

Cylindrical Roller Bearings

SL0149 Series



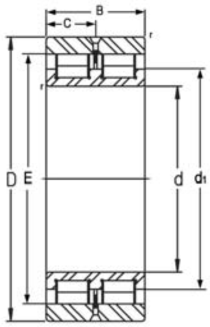
SL01

Technical Parameters:

Bearing Code	Dimensions							Loading Rating			Limiting speed		Mass
	d	D	B	d1	D1	C	r	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
								Cr	Cor	Cur	nG	nB	
	mm							KN			rpm		kg
SL01 4912	60	85	25	70.5	73.5	12.5	1	71	125	16.7	4500	3200	0.49
SL01 4914	70	100	30	82.5	87.4	15	1	108	189	24.6	3800	2800	0.78
SL01 4916	80	110	30	91.4	96.2	15	1	115	211	27.5	3400	2500	0.88
SL01 4918	90	125	35	103.9	110.7	17.5	1.1	155	295	37	3000	2300	1.35
SL01 4920	100	140	40	116.4	125	20	1.1	196	380	47	2700	2000	1.95
SL01 4922	110	150	40	125	133.6	20	1.1	204	410	49.5	2490	1800	2.15
SL01 4924	120	165	45	138.6	148.6	22.5	1.1	228	455	53	2270	1700	2.95
SL01 4926	130	180	50	148.4	160	25	1.5	265	530	60	2090	1500	3.95
SL01 4928	140	190	50	159	170.5	25	1.5	275	570	63	1960	1400	4.2
SL01 4930	150	210	60	171.8	187.2	30	2	415	840	88	1800	1200	6.65
SL01 4932	160	220	60	184.2	200.3	30	2	435	900	93	1700	1100	7
SL01 4934	170	230	60	193.1	209.1	30	2	445	950	96	1600	1000	7.35
SL01 4936	180	250	69	204.9	224.1	34.5	2	580	1230	121	1500	950	10.8
SL01 4938	190	260	69	215	234.3	34.5	2	590	1290	125	1440	900	11.2
SL01 4940	200	280	80	230.5	252.3	40	2.1	690	1480	142	1350	850	15.8
SL01 4944	220	300	80	248	268.5	40	2.1	720	1590	150	1200	750	17.2
SL01 4948	240	320	80	270.6	292.3	40	2.1	750	1740	160	1160	700	18.5
SL01 4952	260	360	100	294.5	322.1	50	2.1	1120	2500	221	1050	600	32
SL01 4956	280	380	100	316.5	344.6	50	2.1	1170	2700	233	980	550	34
SL01 4960	300	420	118	340.7	374.3	59	3	1650	3800	315	900	460	53

Cylindrical Roller Bearings

SL0248 Series



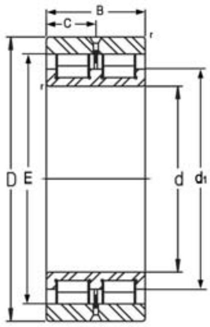
SL02

Technical Parameters:

Bearing Code	Dimensions							Loading Rating			Limiting speed		Mass
	d	D	B	d1	E	C	r	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
								Cr	Cor	Cur	nG	nB	
	mm							KN			rpm		KG
SL02 4830	150	190	40	165.1	178.3	20	1.1	237	550	61	1900	1300	2.8
SL02 4832	160	200	40	173.7	186.9	20	1.1	243	580	63	1800	1200	3
SL02 4834	170	215	45	186.3	201.3	22.5	1.1	265	620	66	1700	1200	3.95
SL02 4836	180	225	45	199.1	214.1	22.5	1.1	275	660	70	1600	1100	4.15
SL02 4838	190	240	50	207.6	225	25	1.5	315	750	77	1500	1100	5.45
SL02 4840	200	250	50	218.1	235.5	25	1.5	325	790	80	1400	1000	5.7
SL02 4844	220	270	50	239.1	256.5	25	1.5	340	870	85	1300	850	6.2
SL02 4848	240	300	60	259.5	281.9	30	2	520	1290	120	1200	750	9.9
SL02 4852	260	320	60	281.8	304.2	30	2	540	1400	128	1100	700	10.6
SL02 4856	280	350	69	306.8	332.4	34.5	2	710	1860	163	1000	600	15.6
SL02 4860	300	380	80	327.9	356.7	40	2.1	830	2120	185	950	550	22
SL02 4864	320	400	80	350.9	379.7	40	2.1	860	2280	194	900	500	23.5
SL02 4868	340	420	80	368.1	396.9	40	2.1	880	2390	201	850	480	25
SL02 4872	360	440	80	391	419.8	40	2.1	910	2550	210	800	440	26
SL02 4876	380	480	100	419	455.8	50	2.1	1330	3550	290	750	400	44
SL02 4880	400	500	100	433.8	470.59	50	2.1	1360	3700	295	700	380	45.8

Cylindrical Roller Bearings

SL0249 Series



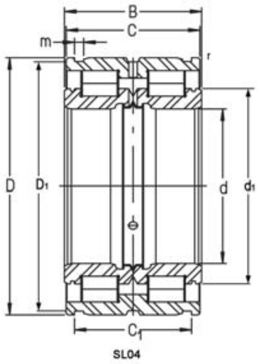
SL02

Technical Parameters:

Bearing Code	Dimensions							Loading Rating			Limiting speed		Mass
	d	D	B	d1	E	C	r	Dyn.	Stat.	Fatigue limit load	Limiting speed	Reference speed	
								Cr	Cor	Cur	nG	nB	
	mm							KN			rpm		KG
SL02 4912	60	85	25	70.3	77.51	12.5	1	71	125	16.7	4500	3200	0.47
SL02 4914	70	100	30	82.5	91.87	15	1	108	189	24.6	3800	2800	0.75
SL02 4916	80	110	30	91.4	100.78	15	1	115	211	27.5	3400	2500	0.85
SL02 4918	90	125	35	103	115.2	17.5	1.1	155	295	37	3000	2300	1.3
SL02 4920	100	140	40	116.4	129.6	20	1.1	196	380	47	2700	2000	1.9
SL02 4922	110	150	40	125	138.2	20	1.1	204	410	49.5	2490	1800	2.1
SL02 4924	120	165	45	138.6	153.55	22.5	1.1	228	455	53	2270	1700	2.95
SL02 4926	130	180	50	149.5	165.4	25	1.5	265	530	60	2090	1500	3.8
SL02 4928	140	190	50	160	175.9	25	1.5	275	570	63	1960	1400	4.1
SL02 4930	150	210	60	171.8	192.77	30	2	415	840	88	1800	1200	6.45
SL02 4932	160	220	60	184.2	206.16	30	2	435	900	93	1710	1100	6.8
SL02 4934	170	230	60	193.1	215.08	30	2	445	950	96	1620	1000	7.1
SL02 4936	180	250	69	204.9	230.5	34.5	2	580	1230	121	1510	950	10.5
SL02 4938	190	260	69	215	240.7	34.5	2	590	1290	125	1440	900	10.9
SL02 4940	200	280	80	230.5	259.34	40	2.1	690	1480	142	1350	850	15.3
SL02 4944	220	300	80	248	276.52	40	2.1	720	1590	150	1250	750	16.7
SL02 4948	240	320	80	270.6	299.46	40	2.1	750	1740	160	1160	700	17.9
SL02 4952	260	360	100	294.5	331.33	50	2.1	1120	2500	221	1050	600	31.2
SL02 4956	280	380	100	316.5	353.34	50	2.1	1170	2700	233	980	550	33.1
SL02 4960	300	420	118	340.7	385.51	59	3	1650	3800	315	900	460	51.9
SL02 4964	320	440	118	367.5	412.27	59	3	1720	4100	335	850	410	54.9
SL02 4968	340	460	118	385.3	430.11	59	3	1770	4300	350	810	390	57.8
SL02 4972	360	480	118	404	447.95	59	3	1810	4500	360	770	370	60.8
SL02 4976	380	520	140	430.2	481.35	70	4	2280	5600	445	720	340	90.5
SL02 4980	400	540	140	450.5	501.74	70	4	2340	5900	460	690	310	94.6

Cylindrical Roller Bearings

SL04...PP Series

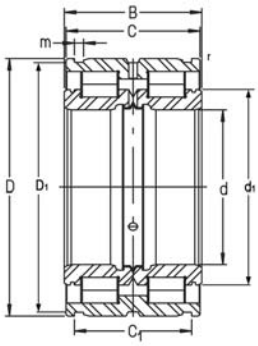


Technical Parameters:

Bearing Code	Dimensions							Loading Rating			Limiting speed	Mass
	d	D	B	d1	D1	C	r	Dyn. Cr	Stat. Cor	Fatigue limit load Cur	nG	
	mm							KN			rpm	kg
SL04 130PP	130	190	80	151	186	79	0.6	430	790	87	800	7.5
SL04 140PP	140	200	80	160.5	196	79	0.6	445	840	91	750	8
SL04 150PP	150	210	80	174.4	206	79	0.6	465	920	98	700	8.4
SL04 160PP	160	220	80	184.5	216	79	0.6	480	970	101	700	8.8
SL04 170PP	170	230	80	193.9	226	79	0.6	490	1030	105	650	9.3
SL04 180PP	180	240	80	203.5	236	79	0.6	500	1080	110	600	9.8
SL04 190PP	190	260	80	218	254	79	0.6	520	1130	113	550	12.7
SL04 200PP	200	270	80	227.15	264	79	0.6	540	1210	119	550	13.2
SL04 220PP	220	300	95	249	294	94	1	700	1550	150	480	19.5
SL04 240PP	240	320	95	272	314	94	1	740	1700	160	480	21
SL04 260PP	260	340	95	293	334	94	1	840	1990	182	440	22.5
SL04 300PP	300	380	95	328.5	374	94	1	900	2250	199	380	25.5

Cylindrical Roller Bearings

SL0450 Series



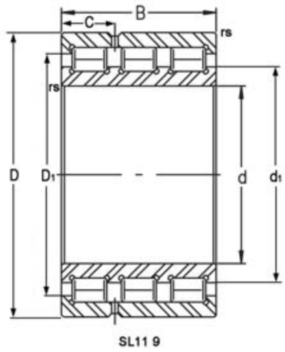
SL04

Technical Parameters:

Bearing Code	Dimensions							Loading Rating			Limiting speed	Mass
	d	D	B	d1	D1	C	r	Dyn. Cr	Stat. Cor	Fatigue limit load Cur	nG	
	mm							KN			rpm	kg
SL04 5004PP	20	42	30	30.55	40.2	29	0.3	40.5	49	7.2	4000	0.2
SL04 5005PP	25	47	30	35.35	45.2	29	0.3	44.5	58	7.9	3600	0.24
SL04 5006PP	30	55	34	40.6	53	33	0.3	50	67	9.2	3000	0.37
SL04 5007PP	35	62	36	46.1	60	35	0.3	63	88	11.8	2600	0.48
SL04 5008PP	40	68	38	51.4	65.8	37	0.3	76	103	14.7	2400	0.56
SL04 5009PP	45	75	40	57	72.8	39	0.3	92	130	18.1	2200	0.7
SL04 5010PP	50	80	40	61.8	77.8	39	0.3	97	142	19.8	2000	0.76
SL04 5011PP	55	90	46	68.6	87.4	45	0.3	115	175	24	1800	1.18
SL04 5012PP	60	95	46	73.7	92.4	45	0.6	120	189	26	1700	1.26
SL04 5013PP	65	100	46	78.8	97.4	45	0.6	125	203	28	1600	1.33
SL04 5014PP	70	110	54	84.5	107.1	53	0.6	168	265	35	1400	1.87
SL04 5015PP	75	115	54	89.95	112.1	53	0.6	194	300	39.5	1400	1.96
SL04 5016PP	80	125	60	97.1	122.1	59	0.6	203	325	42.5	1300	2.71
SL04 5017PP	85	130	60	103.9	127.1	59	0.6	211	350	45	1200	2.83
SL04 5018PP	90	140	67	109.3	137	66	0.6	305	510	62	1100	3.71
SL04 5019PP	95	145	67	113.35	142	66	0.6	315	530	64	1100	3.88
SL04 5020PP	100	150	67	117.35	147	66	0.6	330	550	66	1000	3.95
SL04 5022PP	110	170	80	131.55	167	79	0.6	395	680	78	900	6.57
SL04 5024PP	120	180	80	140.9	176	79	0.6	410	740	83	900	7.04
SL04 5026PP	130	200	95	156.75	196	94	0.6	540	960	105	800	10.5
SL04 5028PP	140	210	95	165.4	206	94	0.6	610	1100	118	750	11.1
SL04 5030PP	150	225	100	175.7	221	99	0.6	710	1260	131	700	13.3
SL04 5032PP	160	240	109	189	236	108	0.6	740	1360	140	650	16.6
SL04 5034PP	170	260	122	200.7	254	121	0.6	960	1750	174	600	22.6
SL04 5036PP	180	280	136	217.8	274	135	0.6	1140	2130	205	550	30.1
SL04 5038PP	190	290	136	225.65	284	135	0.6	1160	2210	211	550	31.5
SL04 5040PP	200	310	150	243.05	304	149	0.6	1350	2600	245	500	40.8
SL04 5044PP	220	340	160	259.85	334	159	1	1570	3050	280	480	52.5
SL04 5048PP	240	360	160	279.25	354	159	1	1630	3300	295	440	56
SL04 5052PP	260	400	190	304.95	394	189	1.1	2380	4700	405	400	84.5
SL04 5056PP	280	420	190	320.95	413	189	1.1	2600	5200	440	380	90
SL04 5060PP	300	460	218	346.85	453	216	1.1	3000	5800	480	340	126

Cylindrical Roller Bearings

SL11 Series

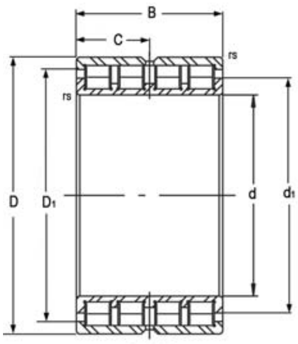


Technical Parameters:

Bearing Code	Dimensions							Basic Loading Rating		Limiting speed		Mass
	d	D	B	r_{min}	C	d1	D1	Dyn.	Stat.	Limiting speed	Reference speed	
								Cr	Cor	n_G	n_B	
	mm							KN		rpm		kg
SL11914	70	100	44	1	15	83	87	142	265	3800	2800	1.15
SL11916	80	110	44	1	15	92	96	150	300	3400	2500	1.29
SL11918	90	125	52	1.1	17.5	103	110	205	425	3000	2100	2
SL11920	100	140	59	1.1	20	116.5	124.5	260	550	2700	1800	2.9
SL11922	110	150	59	1.1	20	125	133.5	270	600	2500	1600	3.15
SL11924	120	165	66	1.1	22.5	139	148	305	660	2300	1500	4.3
SL11926	130	180	73	1.5	25	149.5	159.5	355	770	2100	1300	5.75
SL11928	140	190	73	1.5	25	160	170	370	830	2000	1300	6.1
SL11930	150	210	88	2	30	171.5	186.5	560	1230	1800	1100	9.7
SL11932	160	220	88	2	30	185	199.5	580	1330	1700	1000	10.2
SL11934	170	230	88	2	30	194	208.5	600	1390	1600	950	10.8
SL11936	180	250	101	2	34.5	206	223.5	780	1810	1500	850	15.7
SL11938	190	260	101	2	34.5	216	233	800	1900	1400	800	16.4
SL11940	200	280	116	2.1	40	231	251.5	940	2220	1400	750	22.8

Cylindrical Roller Bearings

SL12 Series



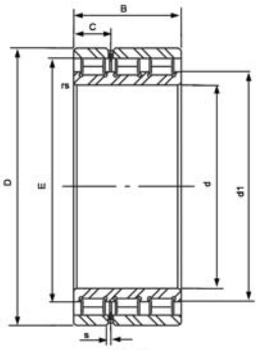
SL12 9

Technical Parameters:

Bearing Code	Dimensions							Basic Loading Rating		Limiting speed		Mass
	d	D	B	r_{min}	C	d1	D1	Dyn.	Stat.	Limiting speed	Reference speed	
								Cr	Cor	n_G	n_B	
	mm							KN		rpm		kg
SL12914	70	100	57	1	28.5	83	87	177	355	3800	2800	1.49
SL12916	80	110	57	1	28.5	92	96	188	395	3400	2400	1.65
SL12918	90	125	68	1.1	34	103	110	255	560	3000	2000	2.65
SL12920	100	140	78	1.1	39	116.5	124.5	325	740	2700	1800	3.85
SL12922	110	150	78	1.1	39	125	133.5	340	800	2500	1600	4.2
SL12924	120	165	87	1.1	43.5	139	148	380	880	2300	1500	6.65
SL12926	130	180	96	1.5	48	149.5	159.5	445	1030	2100	1300	7.55
SL12928	140	190	96	1.5	48	160	170	460	1100	2000	1200	8.05
SL12930	150	210	116	2	58	171.5	186.5	700	1640	1800	1100	12.8
SL12932	160	220	116	2	58	185	199.5	730	1770	1700	950	13.5
SL12934	170	230	116	2	58	194	208.5	750	1860	1600	900	14.2
SL12936	180	250	133	2	66.5	206	223.5	970	2410	1500	800	20.7
SL12938	190	260	133	2	66.5	216	233	1000	2550	1400	750	21.6
SL12940	200	280	152	2.1	76	231	251.5	1180	2950	1400	700	29.9

Cylindrical Roller Bearings

SL14 Series



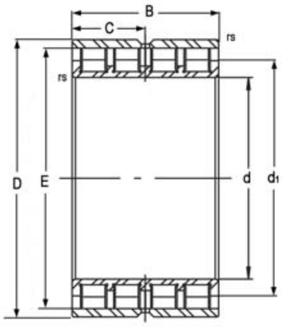
SL14 9

Technical Parameters:

Bearing Code	Dimensions								Basic Loading Rating		Limiting speed		Mass
	d	D	B	r_{min}	s	C	d1	E	Dyn.	Stat.	Limiting speed	Reference speed	
									Cr	Cor	n_G	n_B	
	mm								KN		rpm		kg
SL14914	70	100	44	1	1	15	83	91	142	265	3800	2800	1.1
SL14916	80	110	44	1	1	15	92	100	150	300	3400	2500	1.25
SL14918	90	125	52	1.1	1.5	17.5	103	115	205	425	3000	2100	1.95
SL14920	100	140	59	1.1	2	20	116.5	129	260	550	2700	1800	2.85
SL14922	110	150	59	1.1	2	20	125	138	270	600	2500	1600	3.1
SL14924	120	165	66	1.1	3	22.5	139	153	305	660	2300	1500	4.2
SL14926	130	180	73	1.5	4	25	149.5	165	355	770	2100	1300	5.6
SL14928	140	190	73	1.5	4	25	160	176	370	830	2000	1300	6
SL14930	150	210	88	2	4	30	171.5	192	560	1230	1800	1100	9.5
SL14932	160	220	88	2	4	30	185	206	580	1330	1700	1000	10
SL14934	170	230	88	2	4	30	194	215	600	1390	1600	950	10.5
SL14936	180	250	101	2	4	34.5	206	230	780	1810	1500	850	15.5
SL14938	190	260	101	2	4	34.5	216	240	80	1900	1400	800	16.2
SL14940	200	280	116	2.1	5	40	231	259	940	2220	1400	750	22.4

Cylindrical Roller Bearings

SL15 Series



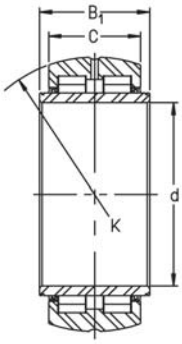
SL15 9

Technical Parameters:

Bearing Code	Dimensions								Basic Loading Rating		Limiting speed		Mass
	d	D	B	r_{min}	s	C	d1	E	Dyn. Cr	Stat. Cor	Limiting speed n_G	Reference speed n_B	
	mm								KN		rpm		kg
SL15914	70	100	57	1	1	28.5	83	91	177	355	3800	2800	1.45
SL15916	80	110	57	1	1	28.5	92	100	188	395	3400	2400	1.6
SL15918	90	125	68	1.1	1.5	34	103	115	255	560	3000	2000	2.6
SL15920	100	140	78	1.1	2	39	116.5	129	325	740	2700	1800	3.8
SL15922	110	150	78	1.1	2	39	125	138	340	800	2500	1600	4.15
SL15924	120	165	87	1.1	3	43.5	139	153	380	880	2300	1500	5.55
SL15926	130	180	96	1.5	4	48	149.5	165	445	1030	2100	1300	7.4
SL15928	140	190	96	1.5	4	48	160	176	460	1100	2000	1200	7.9
SL15930	150	210	116	2	4	58	171.5	192	700	1640	1800	1100	12.6
SL15932	160	220	116	2	4	58	185	206	730	1770	1700	950	13.5
SL15934	170	230	116	2	4	58	194	215	750	1860	1600	900	13.9
SL15936	180	250	133	2	4	66.5	206	230	970	2410	1500	800	20.4
SL15938	190	260	133	2	4	66.5	216	240	1000	2550	1400	750	21.4
SL15940	200	280	152	2.1	5	76	231	259	1180	2950	1400	700	29.4

Cylindrical Roller Bearings

SL06 Series



SL06

Technical Parameters:

Bearing Code	Dimensions					Basic Loading Rating		Limiting speed	Mass
	d	OD	Width	Outer ring width	Axial play	Dyn.	Stat.	nG	
		K	B1	C	s	Cr	Cor		
	mm					KN		rpm	kg
SL06 016E	80	120	55	45	2.5	172	300	1300	1.8
SL06 018E	90	140	60	50	2.5	219	370	1200	2.95
SL06 020E	100	150	65	55	2.5	280	490	1100	3.45
SL06 022E	110	170	75	60	5	340	620	950	5.2
SL06 024E	120	180	75	60	5	350	660	850	5.5
SL06 026E	130	200	80	65	5	435	810	800	7.8
SL06 028E	140	210	85	70	5	495	930	750	8.55
SL06 030E	150	225	90	75	5	540	1020	700	10.5
SL06 032E	160	240	110	90	7.5	660	1260	650	14.3
SL06 034E	170	260	115	95	7.5	760	1420	600	18.1
SL06 036E	180	280	120	100	7.5	790	1520	550	23
SL06 038E	190	290	135	110	10	950	1850	550	26.5
SL06 040E	200	310	140	115	10	1070	2060	500	32
SL06 044E	220	340	150	125	10	1260	2440	460	42
SL06 048E	240	360	155	130	10	1310	2600	430	46