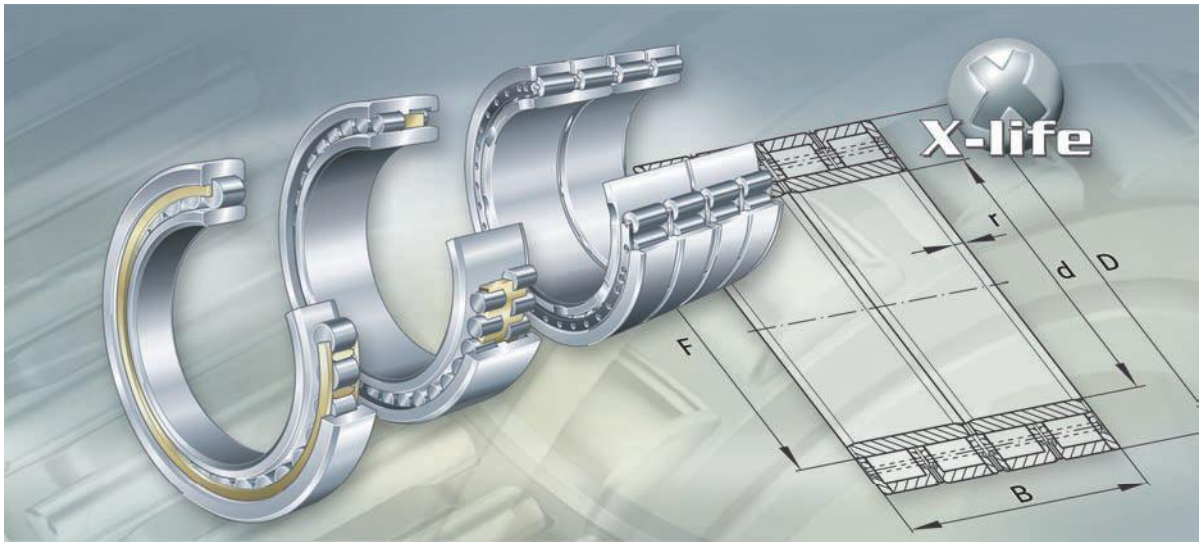
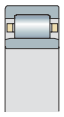


Cylindrical roller bearings

Single row, with cage
Double row, with cage
Four-row, with cage
Full complement
Self-aligning
Split



Cylindrical roller bearings

X-life

Single row cylindrical roller bearings with cage **282**

Single row bearings with cage have very high radial load carrying capacity and are suitable for high speeds. The rollers are guided between rigid ribs by one of the two bearing rings. This ring and the removable ring can be fitted separately. In addition to non-locating, semi-locating and locating bearings with a cylindrical bore, high precision bearings with a tapered bore are also available as non-locating bearings for machine tools.

Double row cylindrical roller bearings with cage **388**

These bearings have high load carrying capacity and rigidity. The bearing rings can be fitted separately.
Bearings with a cylindrical bore are non-locating bearings and are used, for example, in rolling mills, plastics calenders and large gearboxes. High precision bearings with a tapered bore are used for the radial support of main spindles in machine tools.

Four-row cylindrical roller bearings with cage **414**

These non-locating bearings can support extremely high radial forces. Special bearings are required for the support of axial forces. The principal areas of application are rolling mills, roll presses and calenders. Bearings with a cylindrical bore are normally designed for a tight fit on the roll journal. Bearings with a tapered bore have a tight fit.

Full complement cylindrical roller bearings **442**

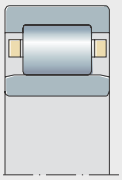
Full complement bearings have extremely high load capacity and rigidity but cannot achieve speeds as high as those of bearings with a cage. Single row bearings are semi-locating bearings, while double row bearings are available as non-locating, semi-locating and locating bearings, for example for gearboxes. Double row bearings with annular slots in the outer rings are locating bearings. These sealed bearings are highly suitable for cable sheave arrangements.

Self-aligning cylindrical roller bearings **464**

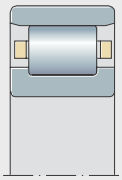
These bearings were specially developed for the dry section of paper machinery. They are ideal as non-locating bearings, allow angular adjustment due to the spherical outer ring and the plain bearing pivot ring and are designed for operating temperatures up to +200 °C. In the case of bearings with a tapered bore, the radial internal clearance can be set precisely.

Split cylindrical roller bearings **476**

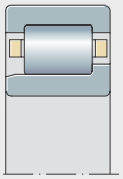
Split cylindrical roller bearings are used in bearing positions that can only be accessed with difficulty, for example on cranked and very long shafts. The bearing design is matched to the specific application. Single row bearings are available as non-locating, semi-locating and locating bearings.
Double row and four-row bearings were developed as locating or non-locating bearings especially for the drive spindles of roll stands.



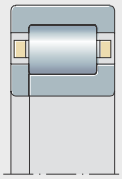
NU



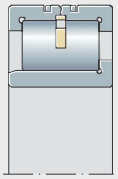
N



NJ

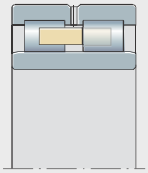


NUP

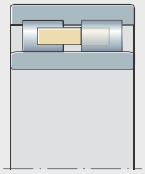


LSL1923

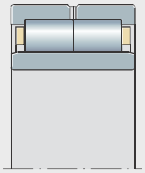
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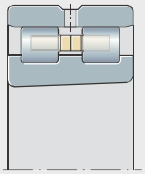
NNU40, NNU48, NNU49



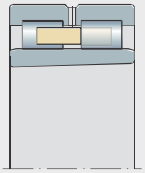
NNU41



Z-5..ZL2-01

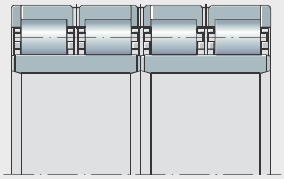


NN30..-AS-K-M-SP

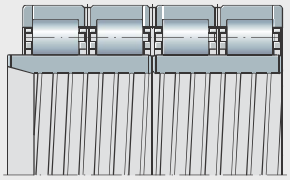


NNU49..-S-K-M-SP

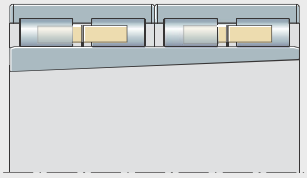
00014E00



Z-5..ZL4-01, F-8..ZL4-01

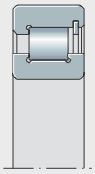


Z-5..ZL4-02, F-8..ZL4-02

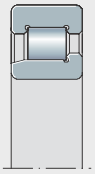


Z-5..ZL4-03, F-8..ZL4-03

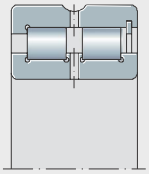
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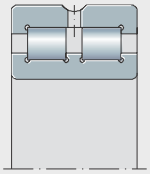
SL1818, SL1829, SL1830, SL1822



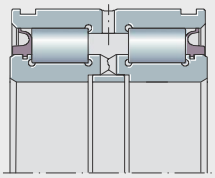
SL1923



SL1850

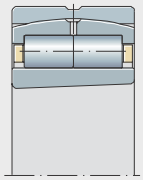


SL0148, SL0149



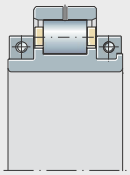
SL0450..-PP, SL04..-PP

00014E02

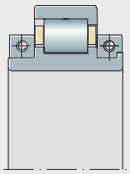


Z-5..ZL2-02, F-8..ZL2-02

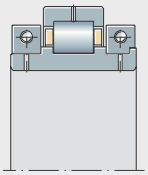
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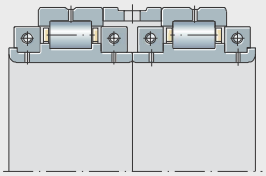
Z-5..ZL1-05, F-8..ZL1-05



Z-5..ZL1-06, F-8..ZL1-06

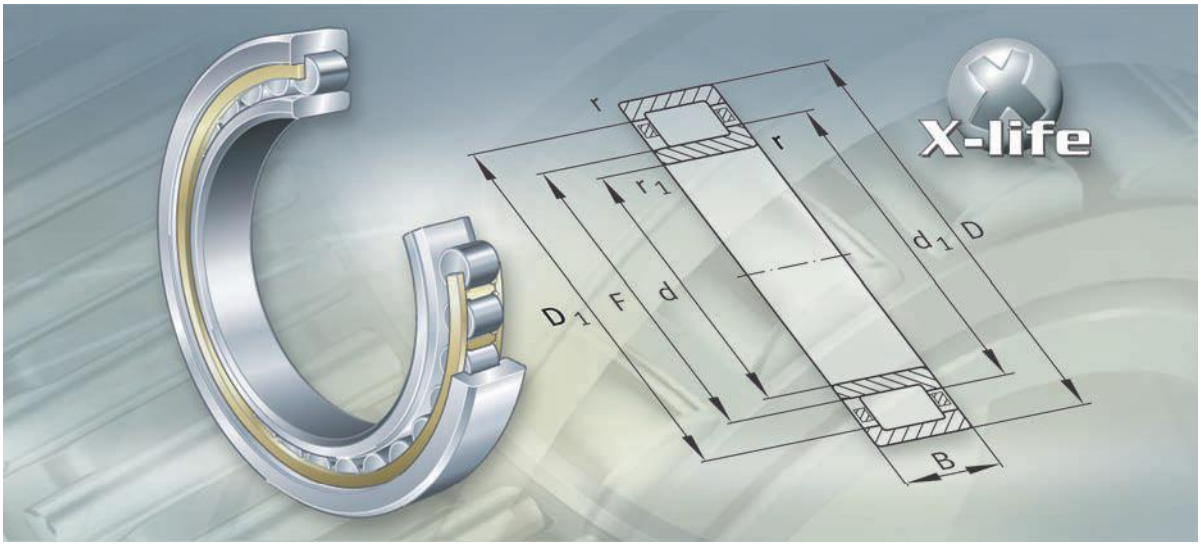


Z-5..ZL1-07, F-8..ZL1-07



Z-5..ZL2-03, F-8..ZL2-03

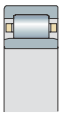
00014E04



Single row cylindrical roller bearings with cage

Single row cylindrical roller bearings with cage

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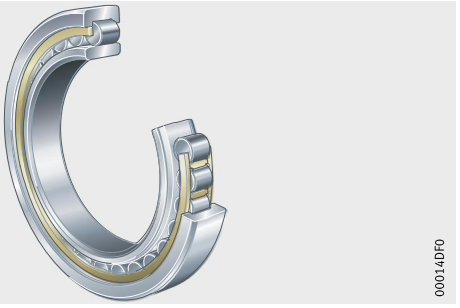
Product overview

Single row cylindrical roller bearings with cage

Non-locating bearings

With cylindrical bore

NU10, NU12, NU18, NU19, NU28, NU29, NU30, NU31, NU38, NU39..-E, NU4, NU2..-E, NU3..-E, NU20..-E, NU22..-E, NU23..-E, Z-5..ZL1-01, F-8..ZL1-01



N2..-E, N3..-E, N10, N18, N28, N29, N4, Z-5..ZL1-02, F-8..ZL1-02



With tapered bore

NU10..-K, NU30..-K



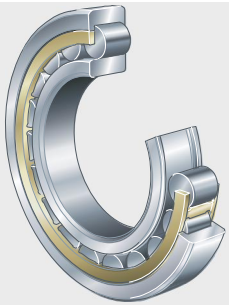
N10..-K-M1-SP, N19..-K-M1-SP



Semi-locating bearings

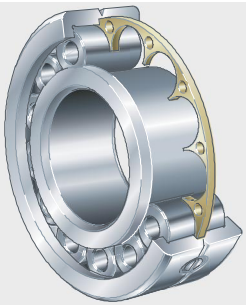
With cage

NJ2..-E, NJ3..-E, NJ22..-E, NJ23..-E, NJ4, NJ10, NJ18, NJ19, NJ28, NJ29, Z-5..ZL1-03, F-8..ZL1-03



With disc cage

LSL1923



Locating bearings

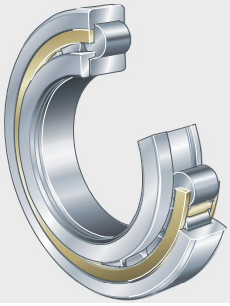
With rib washer

NUP2..-E, NUP3..-E, NUP20..-E, NUP22..-E, NUP23..-E, NUP10, NUP18, NUP19, NUP28, NUP29, NUP4, Z-5..ZL1-04, F-8..ZL1-04



With L-section ring

NJ2..-E + HJ, NJ3..-E + HJ, NJ22..-E + HJ, NJ23..-E + HJ, NJ4 + HJ, NJ10 + HJ, NJ18 + HJ, NJ19 + HJ, NJ28 + HJ, NJ29 + HJ



Single row cylindrical roller bearings with cage

Features

Single row cylindrical roller bearings with cage are units comprising solid inner and outer rings and cylindrical roller and cage assemblies. The outer rings have rigid ribs on both sides or no ribs, the inner rings have one or two rigid ribs or are designed without ribs. The cage prevents the cylindrical rollers from coming into contact with each other during rolling.

The cylindrical roller bearings have high rigidity, high radial load carrying capacity and, due to the cage, are suitable for higher speeds than full complement designs. Bearings with the suffix E have a higher capacity roller set and are thus designed for very high load carrying capacity.

The bearings are separable and are therefore easier to fit and dismantle. As a result, both bearing rings can be given a tight fit.

Single row cylindrical roller bearings with cage are available as non-locating, semi-locating and locating bearings.

X-life

Some sizes are supplied in the X-life design. These bearings are indicated in the dimension tables. Bearings of X-life quality have, for example, a lower roughness R_a and a better geometrical accuracy of the raceways than comparable designs that are not X-life. As a result, these bearings have higher load carrying capacity and longer rating life for the same dimensioning. In certain applications, this means that a smaller bearing arrangement can be designed where necessary.

Non-locating bearings

Cylindrical roller bearings NU and N are non-locating bearings and can support radial forces only. In series NU, the outer ring has two ribs, while the inner ring has no ribs. Bearings of series N have two ribs on the inner ring and an outer ring without ribs.

Special bearings with cylindrical bore

In addition to cylindrical roller bearings with standardised designations and main dimensions, we also supply special bearings. Special bearings of the type NU (Z-5..ZL1-01) are used, for example, in drilling rig equipment. They have chamfers on the inner ring bore and, in some cases, inch dimensions.

Special bearings for high speed tubular stranding machines are of the type N (Z-5..ZL1-02 or F-8..ZL1-02) and have a lubrication groove and three lubrication holes in the outer ring. The robust solid brass cage is guided on the inner ring. In order to reduce the inertia forces, the bearings contain only half as many rollers as normal bearings of the same size. Their load carrying capacity is, however, sufficient for the application. Large bearings have threaded holes for the location of eye bolts for mounting. The bearings for high speed tubular stranding machines have metric main dimensions.

High precision bearings with tapered bore

Single row cylindrical roller bearings of series N10..-K-M1-SP and N19..-K-M1-SP are high precision bearings for machine tools. In the case of bearings with a tapered bearing bore (taper 1:12), the radial internal clearance or preload can be set to an optimum value. These bearings are characterised by their high load carrying capacity, high rigidity and excellent accuracy.

Axial displacement

The outer and inner ring can be axially displaced relative to each other from the central position by the value “s”.

Semi-locating bearings

Cylindrical roller bearings NJ and bearings with disc cage LSL1923 are semi-locating bearings. Semi-locating bearings can support axial forces in one direction as well as high radial forces and can thus guide shafts axially in one direction. They act as non-locating bearings in the opposite direction. The bearings have two ribs on the outer ring and one rib on the inner ring.

Bearings with disc cage

Since they have a larger number of rolling elements and larger rolling elements, bearings of series LSL have higher radial and axial load carrying capacity than all comparable cylindrical roller bearing designs with a solid cage. They can withstand high shock loads and vibrations, support large centrifugal forces and allow accelerations up to 500 m/s^2.

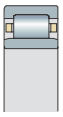
Due to the low frictional torque across the entire speed range and the low heat generation, the bearings have the highest limiting speeds of all cylindrical roller bearings. In addition, the optimum heat dissipation ensures thermally stable conditions in the bearing.

Bearings with L-section ring

Non-locating bearings NU can be combined with an L-section ring HJ to form a semi-locating bearing unit. They must not be installed with two L-section rings (due to the risk of jamming).

Axial displacement

The outer and inner ring can be axially displaced relative to each other in one direction by the value “s”.



Locating bearings

Cylindrical roller bearings NUP and NJ with HJ are locating bearings. Locating bearings can support axial forces in both directions as well as high radial forces and can thus guide shafts axially in both directions.

Bearings with rib washer

The design NUP has two ribs on the outer ring and one rigid rib on the inner ring. A loose rib washer is fitted on the opposite side.

Single row cylindrical roller bearings with cage

Bearings with L-section ring

Semi-locating bearings NJ can be combined with an L-section ring HJ to form a locating bearing unit. This design has two ribs on the outer ring, one rib on the inner ring and additionally an L-section ring for the ribless side of the inner ring. The L-section rings suitable for the bearings are indicated in the dimension tables.
The bearing and L-section ring must be ordered separately.

L-section rings

L-section rings are advantageous where, under high loads, the seating surface of the inner ring in bearings of series NUP bearings with a loose rib washer is too small to provide a sufficiently high bearing seat. In some applications, they also make it easier to fit and dismantle the bearings.

Sealing

The bearings are supplied without seals.

Lubrication

The bearings can be lubricated from the end faces using grease or oil.

Operating temperature

Single row cylindrical roller bearings with cage can be used at operating temperatures from –30 °C to +150 °C.
For continuous operating temperatures above +120 °C, please contact us.

Cages

The suffix M1 indicates standard bearings with roller-guided brass cages. Further cage suffixes: see table, page 289.
Please contact us for information on the cage designs for special bearings.

Disc cage

In cylindrical roller bearings LSL1923, an externally-guided flat brass disc cage prevents the cylindrical rollers from coming into contact with each other during rolling.

The cage has pockets to accommodate the rolling elements. The rolling elements are guided between the ribs on the outer ring. Due to its low mass, the cage is subjected to only minimal strain under acceleration. It therefore fulfils ideally its role as an element separating the rolling elements and supporting the inertia forces.

Lubricant is exchanged via axial through holes. Good oil flow through the axially open bearing is supported by the axial holes.

The outer ring is axially split and held together by fasteners.

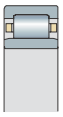
Suffixes

Suffixes for available designs of standard bearings: see table.

Available designs

Suffix[1)]	Description	Design
C3	Radial internal clearance larger than normal	Special design, available by agreement only
C4	Radial internal clearance larger than C3	
E	Increased capacity design	Standard
EX	Increased capacity design, design modified in accordance with standard (parts from these bearings must not be interchanged with parts from bearings of the same size of the previous design E)	
K	Tapered bore, taper 1:12	
M	Solid brass cage, two-piece, roller-guided	Special design, available by agreement only
MA	Solid brass cage, rib-guided on outer ring	
MPA	Solid brass window cage, rib-guided on outer ring	
MP1A	Solid brass cage, single-piece, rib-guided on outer ring	
MP1B	Solid brass cage, single-piece, rib-guided on inner ring	
M1	Solid brass cage, roller-guided	Standard
M1A	Solid brass cage, two-piece, rib-guided on outer ring	Special design, available by agreement only
M1B	Solid brass cage, two-piece, rib-guided on inner ring	
SP	Tolerance class SP	Standard

1) In the case of non-standardised cylindrical roller bearings, the design (for example radial internal clearance, cage, accuracy) is specified in the designation (Z-5 or F-8). In the case of these bearings, additional suffixes are only used for deviations from the original design.



Single row cylindrical roller bearings with cage

Design and safety guidelines

Permissible skewing

There is no significant reduction in rating life if the misalignment of the inner ring relative to the outer ring does not exceed the following values:

- 4′ in bearings of series 10, 12, 18, 19, 2, 3, 4
- 3′ in bearings of series 20, 22, 23, 28, 29, 30, 31, 38, 39.

Axial load carrying capacity

The axial load carrying capacity is dependent on:

- the size of the sliding surfaces between the ribs and the end faces of the rolling elements
- the sliding velocity at the ribs
- the lubrication on the contact surfaces
- tilting of the bearing.

Ribs subjected to load must be supported across their entire height.

The permissible axial load $F_{a\,per}$ must not be exceeded, in order to avoid an unacceptable increase in temperature.

The axial limiting load $F_{a\,max}$ must not be exceeded, in order to avoid impermissible pressures at the contact surfaces.

The ratio F_a/F_r must not exceed the value 0,4.

Continuous axial loading without simultaneous radial loading is not permissible.

Permissible and maximum axial load

$$F_{a\,per} = k_S \cdot k_B \cdot d_M^{\,1,5} \cdot n^{-0,6} \leqq F_{a\,max}$$

$$F_{a\,max} = 0,075 \cdot k_B \cdot d_M^{\,2,1}$$

$F_{a\,per}$ N
Permissible axial load

$F_{a\,max}$ N
Axial limiting load

k_S –
Factor as a function of the lubrication method, see table, page 291

k_B –
Factor as a function of the bearing series, see table Bearing factor k_B, page 291

d_M mm
Mean bearing diameter (d + D)/2, see dimension table

n min^{-1}
Operating speed.

Factor k_S for the lubrication method

Lubrication method[1)]	Factor k_s
Minimal heat dissipation, drip feed oil lubrication, oil mist lubrication, low operating viscosity ($\nu < 0{,}5 \cdot \nu_1$)	7,5 to 10
Poor heat dissipation, oil sump lubrication, oil spray lubrication, low oil flow	10 to 15
Good heat dissipation, recirculating oil lubrication (pressurised oil lubrication)	12 to 18
Very good heat dissipation, recirculating oil lubrication with oil cooling, high operating viscosity ($\nu > 2 \cdot \nu_1$)	16 to 24

1) Doped oils should be used, e.g. CLP (DIN 51517) and HLP (DIN 51524) of ISO VG classes 32 to 460 and ATF oils (DIN 51502) and gearbox oils (DIN 51512) of SAE viscosity classes 75 W to 140 W.

Bearing factor k_B

Series	Factor k_B
NJ2..-E, NJ22..-E, NUP2..-E, NUP22..-E	15
NJ3..-E, NJ23..-E, NUP3..-E, NUP23..-E	20
NJ4	22

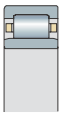
Skewing of the bearing, for example due to shaft deflection, can lead to alternating stresses on the inner ring ribs.
In this case, the axial load must be restricted to F_{as} for bearing tilting of up to max. 2 angular minutes.

$$F_{as} = 20 \cdot d_M^{1,42}$$

If even greater tilting is present, special strength analysis is required.

Minimum radial load

In continuous operation, a minimum radial load of the order of $F_{r\,min} = C_{0r}/60$ is necessary.
If $F_{r\,min} < C_{0r}/60$, please contact us.



Single row cylindrical roller bearings with cage

Equivalent dynamic bearing load

Non-locating bearings

For bearings under dynamic loading, the following applies:

$$P = F_r$$

Semi-locating and locating bearings

If an axial force F_a is present in addition to the radial force F_r, the load ratio must be taken into consideration.

Load ratio and equivalent dynamic load

Load ratio	Equivalent dynamic bearing load
$\frac{F_a}{F_r} \leqq e$	$P = F_r$
$\frac{F_a}{F_r} > e$	$P = 0,92 \cdot F_r + Y \cdot F_a$

P kN
Equivalent dynamic bearing load for combined load
F_a kN
Axial dynamic bearing load
F_r kN
Radial dynamic bearing load
e, Y –
Factors, see table.

Factors e and Y

Series	Calculation factors	
	e	Y
NJ2, NUP2, NJ3, NUP3, NJ4	0,2	0,6
NJ22, NUP22, NJ23, NUP23, LSL1923	0,3	0,4

Operating life of high precision bearings

High precision bearings must guide machine parts with high precision and support forces at up to very high speeds.

They are selected predominantly from the perspectives of:

- accuracy
- rigidity
- running behaviour.

In order that they can fulfil these tasks for as long as possible, the bearings must run without wear. The precondition for this is the creation of a load-bearing hydrodynamic lubricant film at the contact points of the rolling contact partners.
Under these conditions, rolling bearings will achieve their fatigue life in a large number of applications. If the design is appropriate to the fatigue life, the operating life of the bearing is normally restricted by the lubricant operating life.

The decisive factors for the operating life from the perspective of load are the Hertzian pressures occurring at the contacts and the bearing kinematics. For high performance assemblies, individual design with the aid of special calculation programs is therefore advisable.

Since failure as a result of fatigue plays no part in practice in the case of high precision bearings, calculation of the rating life L_{10} in accordance with DIN ISO 281 is not suitable as a means of determining the operating life.

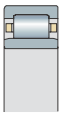
Equivalent static bearing load

For bearings under static loading, the following applies:

$$P_0 = F_{0r}$$

P_0 kN
Equivalent static bearing load
F_{0r} kN
Radial static bearing load.

Static load safety factor of high precision bearings



$$S_0 = \frac{C_{0r}}{P_0}$$

S_0 –
Static load safety factor
C_{0r} kN
Basic static load rating, see dimension tables
P_0 kN
Equivalent static bearing load.

In order to achieve sufficiently smooth running, the static load safety factor for high precision bearings should be $S_0 > 3$.

Single row cylindrical roller bearings with cage

Speeds of high precision bearings

The achievable speed depends on the radial internal clearance while warm from operation.
For calculation, the values from the dimension table are multiplied by the correction factor in the table.

Correction factors

Clearance or preload in operation µm		Correction factor
0 to 5	(clearance)	1 to 1,1
–5 to 0	(preload)	0,8 to 1

The limiting speeds n_G given in the dimension tables for high precision bearings are valid for lubrication with grease or for minimal quantity lubrication with oil and must not be exceeded.

Design of bearing arrangements

Shaft and housing tolerances

Recommended shaft tolerances for radial bearings with cylindrical bore, see table, page 130.

Recommended housing tolerances for radial bearings, see table, page 131.

Recommendations for machining of the tapered shaft and housing for high precision bearings, see table, page 398.

Axial location

In order to prevent lateral creep of the bearing rings, they must be located by force or physical locking means.

The abutment shoulders (shaft and housing) should be sufficiently high and perpendicular to the bearing axis.

The transition from the bearing seating point to the abutment shoulder must be designed with rounding to DIN 5418 or an undercut to DIN 509. The minimum values for the chamfer dimensions r in the dimension tables must be observed.

In the case of semi-locating bearings, the bearing rings only require support on one side, on the rib supporting the axial load.

Full support must be provided for ribs transmitting forces in axially loaded bearings.

Accuracy

The dimensional and running tolerances of the bearings with cylindrical bore correspond to tolerance class PN to DIN 620.

Special bearings for tubular stranding machines running at high speeds have increased accuracy to tolerance class P6 or P5.

High precision bearings with a tapered bore correspond to the more stringent tolerance class SP.

Width tolerances SP

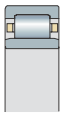
Bore d mm		Width deviation (in relation to bore) Δ_{Bs} µm		Width variation V_{Bs} µm
over	incl.	max.	min.	
180	250	0	−300	5
250	315	0	−350	6
315	400	0	−400	7
400	500	0	−450	8

Inner ring tolerances SP

Bore d mm		Bore deviation				Variation	Radial runout	Axial runout	
		Δ_{dmp} µm		$\Delta_{d1\,mp} - \Delta_{dmp}$ µm		V_{dp} µm	K_{ia} µm	S_d µm	S_{ia} µm
over	incl.								
180	250	30	0	9	0	8	8	6	8
250	315	35	0	11	0	9	9	7	10
315	400	40	0	12	0	12	10	9	12
400	500	45	0	14	0	14	12	11	15

Outer ring tolerances SP

Outside diameter D mm		Outside diameter deviation Δ_{Ds} µm		Variation V_{Dp} µm	Radial runout K_{ea} µm	Axial runout	
						S_D µm	S_{ea} µm
over	incl.						
250	315	0	−18	9	11	8	10
315	400	0	−20	10	13	10	13
400	500	0	−23	12	15	11	15
500	630	0	−28	14	17	13	18
630	800	0	−35	18	20	15	22



Single row cylindrical roller bearings with cage

Radial internal clearance

The radial internal clearance of bearings with a cylindrical bore normally corresponds to internal clearance group CN to DIN 620-4. This also applies to special cylindrical roller bearings for stranding machines.

Radial internal clearance (cylindrical bore)

Bore d mm		Radial internal clearance					
		CN µm		C3 µm		C4 µm	
over	incl.	min.	max.	min.	max.	min.	max.
140	160	70	120	115	165	165	215
160	180	75	125	120	170	170	220
180	200	90	145	140	195	195	250
200	225	105	165	160	220	220	280
225	250	110	175	170	235	235	300
250	280	125	195	190	260	260	330
280	315	130	205	200	275	275	350
315	355	145	225	225	305	305	385
355	400	190	280	280	370	370	460
400	450	210	310	310	410	410	510
450	500	220	330	330	440	440	550
500	560	240	360	360	480	480	600
560	630	260	380	380	500	500	620
630	710	285	425	425	565	565	705
710	800	310	470	470	630	630	790
800	900	350	520	520	690	690	860
900	1000	390	580	580	770	770	960
1000	1120	430	640	640	850	850	1060
1120	1250	470	710	710	950	950	1190
1250	1400	530	790	790	1050	1050	1310
1400	1600	610	890	890	1170	1170	1450
1600	1800	700	1020	1020	1340	1340	1660
1800	2000	760	1120	1120	1480	1480	1840

Bearings with a tapered bore frequently have a radial internal clearance C3 or C4 to DIN 620-4.

Radial internal clearance (tapered bore)

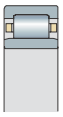
Bore d mm		Radial internal clearance					
		CN µm		C3 µm		C4 µm	
over	incl.	min.	max.	min.	max.	min.	max.
200	225	155	215	200	260	245	305
225	250	170	235	220	285	270	335
250	280	185	255	240	310	295	365
280	315	205	280	265	340	325	400
315	355	225	305	290	370	355	435
355	400	255	345	330	420	405	495
400	450	285	385	370	470	455	555
450	500	315	425	410	520	505	615
500	560	350	470	455	575	560	680

Radial internal clearance of high precision bearings

The radial internal clearance of high precision bearings is smaller than the normal internal clearance and corresponds to internal clearance group C1NA.
The internal clearance is not stated in the designation.
The bearing rings are not interchangeable.

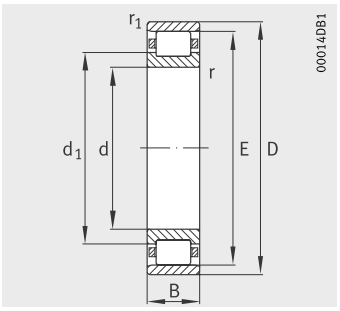
Radial internal clearance C1NA (tapered bore)

Bore d mm		Radial internal clearance C1NA µm	
over	incl.	min.	max.
225	250	65	100
250	280	75	110
280	315	80	120
315	355	90	135
355	400	100	150
400	450	110	170
450	500	120	190

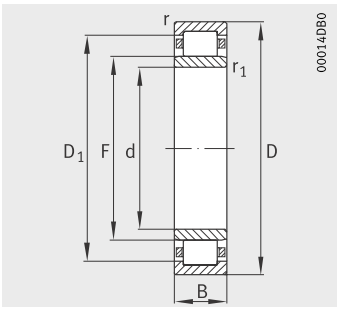


Cylindrical roller bearings with cage

Single row
Non-locating bearings



Design 1
N

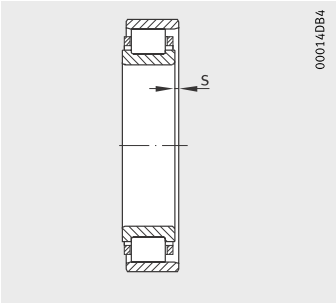


Design 3
NU

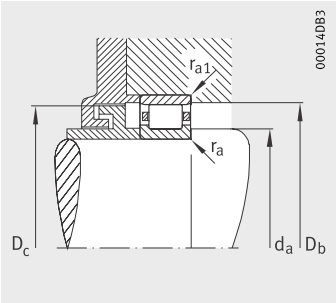
Dimension table · Dimensions in mm

Designation		Design	Mass	Dimensions									
	X-life		m ≈kg	d	D	B	r min.	r_1 min.	$s^{2)}$	E	F	D_1 ≈	d_1 ≈
N426-M1	–	1	40,1	**130**	340	78	5	5	6,2	285	–	–	204,2
NU426-M1	–	3	40,6	**130**	340	78	5	5	6,2	285	185	265,9	–
N428-M1	–	1	46,9	**140**	360	82	5	5	7,6	302	–	–	218,2
NU428-M1	–	3	47,4	**140**	360	82	5	5	7,6	302	198	282,9	–
N330-E-M1	XL	1	26,9	**150**	320	65	4	4	5,5	283	–	–	209,5
NU330-E-M1	XL	3	27	**150**	320	65	4	4	5,5	283	193	269,8	–
NU330-E-M1A	XL	3	27	**150**	320	65	4	4	5,5	283	193	269,8	–
NU330-E-MP1A	XL	3	26,5	**150**	320	65	4	4	5,5	283	193	269,8	–
NU330-E-MPA	XL	3	27,9	**150**	320	65	4	4	5,5	283	193	269,8	–
NU330-E-N-M1	XL	$3^{1)}$	27	**150**	320	65	4	4	5,5	283	193	269,8	–
N2330-E-M1	XL	1	43,3	**150**	320	108	4	4	9,7	283	–	–	209,5
N2330-E-MP1B	XL	1	42,4	**150**	320	108	4	4	9,7	283	–	–	209,5
NU2330-E-M1	XL	3	43,4	**150**	320	108	4	4	9,7	283	193	269,8	–
N430-M1	–	1	53,9	**150**	380	85	5	5	8,1	317	–	–	233,2
NU430-M1	–	3	54,4	**150**	380	85	5	5	8,1	317	213	297,9	–
N332-E-M1	–	1	32,6	**160**	340	68	4	4	5,5	300	–	–	221,6
NU332-E-M1	–	3	31,8	**160**	340	68	4	4	5,6	300	204	286	–
NU332-E-M1A	–	3	31,8	**160**	340	68	4	4	5,6	300	204	286	–
NU332-E-MP1A	–	3	32	**160**	340	68	4	4	5,6	300	204	286	–
N2332-E-M1	–	1	51,4	**160**	340	114	4	4	9,9	300	–	–	221,6
N2332-E-M1B	–	1	51,8	**160**	340	114	4	4	9,9	300	–	–	221,6
NU2332-E-M1	–	3	51,5	**160**	340	114	4	4	9,9	300	204	286	–
N432-M1	–	1	61,5	**160**	400	88	5	5	8,3	334	–	–	247,2
NU432-M1	–	3	61,9	**160**	400	88	5	5	8,3	334	226	314,9	–
NU334-E-MPA	–	3	38,4	**170**	360	72	4	4	6	318	218	301,6	–
N334-E-M1	–	1	37,9	**170**	360	72	4	4	5,9	318	–	–	237
NU334-E-M1	–	3	38	**170**	360	72	4	4	6	318	218	301,6	–
N2334-EX-M1	–	1	61	**170**	360	120	4	4	10,2	320	–	–	235,7
N2334-EX-MP1B	–	1	59,9	**170**	360	120	4	4	10,2	320	–	–	235,7
NU2334-EX-M1	–	3	61,4	**170**	360	120	4	4	10,2	320	216	303	–
N434-M1	–	1	70,4	**170**	420	92	5	5	8,7	351	–	–	261,2
NU434-M1	–	3	71,1	**170**	420	92	5	5	8,7	351	239	329,9	–

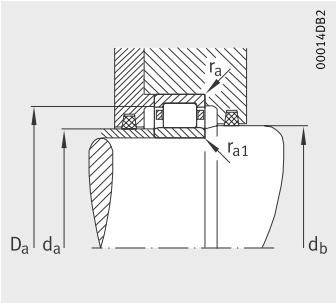
1) With retaining slot in outer ring.



[2] Axial displacement “s” for N and NU



Mounting dimensions for N

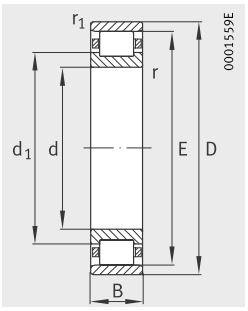


Mounting dimensions for NU

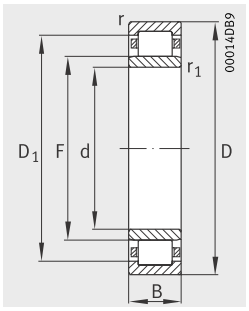
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
154	–	–	316	287	283	4	4	865	1 020	114	3 200	1 900
154	183	187	316	–	–	4	4	865	1 020	95	3 200	1 900
164	–	–	336	304	300	4	4	930	1 120	123	3 000	1 800
164	195	200	336	–	–	4	4	930	1 120	103	3 000	1 800
167	–	–	303	285	281	3	3	900	930	126	3 600	1 940
167	190	195	303	–	–	3	3	900	930	103	3 600	1 940
167	190	195	303	–	–	3	3	900	930	103	3 600	1 940
167	190	195	303	–	–	3	3	900	930	93	3 600	2 000
167	190	195	303	–	–	3	3	900	930	103	3 600	1 940
167	190	195	303	–	–	3	3	900	930	103	3 600	2 000
167	–	–	303	285	281	3	3	1 380	1 600	226	3 200	1 500
167	–	–	303	285	281	3	3	1 380	1 600	226	3 200	1 500
167	190	195	303	–	–	3	3	1 380	1 600	226	3 200	1 460
174	–	–	356	319	315	4	4	980	1 220	132	2 800	1 600
174	210	216	356	–	–	4	4	980	1 220	111	2 800	1 600
177	–	–	323	302	298	3	3	865	1 060	114	3 000	1 770
177	200	211	323	–	–	3	3	865	1 060	96	3 000	1 770
177	200	211	323	–	–	3	3	865	1 060	96	3 000	1 770
177	200	211	323	–	–	3	3	865	1 060	81	3 000	1 800
177	–	–	323	302	298	3	3	1 320	1 830	204	3 000	1 300
177	–	–	323	302	298	3	3	1 320	1 830	204	3 000	1 300
177	200	211	323	–	–	3	3	1 320	1 830	204	3 000	1 340
184	–	–	376	336	332	4	4	1 060	1 320	142	2 800	1 500
184	223	230	376	–	–	4	4	1 060	1 320	118	2 800	1 500
187	215	221	343	–	–	3	3	915	1 140	98	3 000	1 670
187	–	–	343	320	316	3	3	965	1 220	132	3 000	1 610
187	215	221	343	–	–	3	3	965	1 220	105	3 000	1 610
187	–	–	343	322	318	3	3	1 500	2 080	231	2 800	1 200
187	–	–	343	322	318	3	3	1 500	2 080	231	2 800	1 200
187	214	218	343	–	–	3	3	1 500	2 080	231	2 800	1 210
194	–	–	396	353	349	4	4	1 120	1 400	151	2 800	1 500
194	236	243	396	–	–	4	4	1 120	1 400	126	2 800	1 500

Cylindrical roller bearings with cage

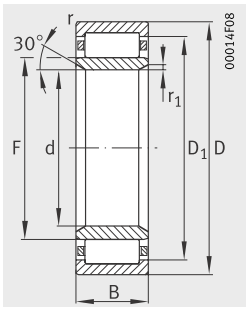
Single row
Non-locating bearings



Design 1
N



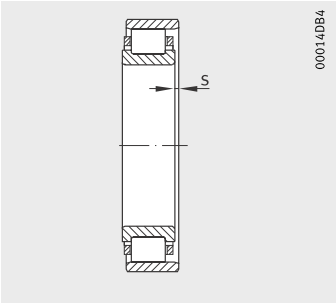
Design 3
NU



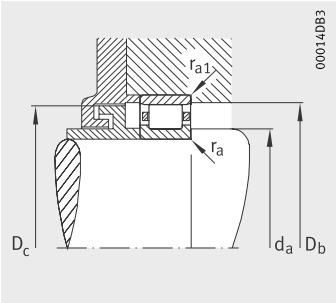
Design 4
NU

Dimension table (continued) · Dimensions in mm

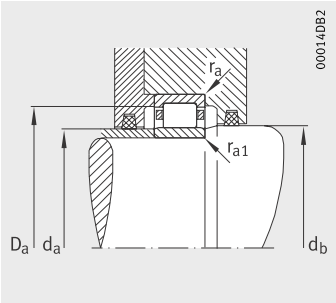
Designation		Design	Mass	Dimensions									
	X-life		m ≈kg	d	D	B	r min.	r_1 min.	$s^{1)}$	E	F	D_1 ≈	d_1 ≈
N236-E-M1	**XL**	1	18,9	**180**	320	52	4	4	4,7	289	–	–	230,2
NU236-E-M1	**XL**	3	18,9	**180**	320	52	4	4	4,7	289	217	278,6	–
NU236-E-M1A	**XL**	3	18,9	**180**	320	52	4	4	4,7	289	217	278,6	–
NU236-E-MP1A	**XL**	3	18,9	**180**	320	52	4	4	4,7	289	217	278,6	–
NU1236-M1	–	3	22,2	**180**	320	62	4	4	4,7	293	213	279,8	–
NU2236-E-M1	**XL**	3	30,7	**180**	320	86	4	4	7,2	291	215	280	–
NU2236-E-M1A	**XL**	3	31,3	**180**	320	86	4	4	7,2	291	215	280	–
N336-E-MP1B	–	1	42,9	**180**	380	75	4	4	6,1	335	–	–	250,5
NU336-E-M1	–	3	43,9	**180**	380	75	4	4	6,1	335	231	319,8	–
NU336-E-M1A	–	3	43,9	**180**	380	75	4	4	6,1	335	231	319,8	–
NU336-E-MP1A	–	3	43,9	**180**	380	75	4	4	6,1	335	231	319,8	–
NU336-E-MPA	–	3	43,9	**180**	380	75	4	4	6,1	335	231	319,8	–
N2336-EX-M1	–	1	71,3	**180**	380	126	4	4	10,5	339	–	–	248
N2336-EX-MP1B	–	1	69,7	**180**	380	126	4	4	10,5	339	–	–	248
NU2336-EX-M1	–	3	71,8	**180**	380	126	4	4	10,5	339	227	320,8	–
NU436-M1	–	3	80,9	**180**	440	95	6	6	8,9	370	250	346,9	–
NU3138-M1	–	3	34,4	**190**	320	104	3	3	9,2	294	222	282,1	–
N238-E-M1	–	1	22,8	**190**	340	55	4	4	4,7	306	–	–	244
N238-E-M1B	–	1	23	**190**	340	55	4	4	4,7	306	–	–	244
NU238-E-M1	–	3	22,8	**190**	340	55	4	4	4,7	306	230	295	–
NU238-E-M1-C3	–	3	22,8	**190**	340	55	4	4	4,7	306	230	295	–
NU238-E-M1A	–	3	22,8	**190**	340	55	4	4	4,7	306	230	295	–
NU238-E-MP1A	–	3	22,2	**190**	340	55	4	4	4,7	306	230	295	–
NU238-E-MPA	–	3	22,2	**190**	340	55	4	4	4,7	306	230	295	–
NU1238-M1	–	3	26,6	**190**	340	65	4	4	4,8	310	226	296,2	–
NU2238-E-M1	–	3	37,1	**190**	340	92	4	4	8	308	228	296,4	–
NU2238-E-M1A	–	3	37,9	**190**	340	92	4	4	8	308	228	296,4	–
Z-549128.ZL	–	4	45,5	**190**	340	114	3	8	7,6	313,1	229,1	299,2	–
N338-E-M1	–	1	50,5	**190**	400	78	5	5	6,3	353	–	–	265,4
NU338-E-M1	–	3	50,6	**190**	400	78	5	5	6,3	353	245	336	–
NU338-E-M1A	–	3	50,6	**190**	400	78	5	5	6,3	353	245	336	–
N2338-EX-M1	–	1	82,5	**190**	400	132	5	5	11	360	–	–	262,5
N2338-EX-MP1B	–	1	80,9	**190**	400	132	5	5	11	360	–	–	262,5
NU2338-EX-M1	–	3	83,1	**190**	400	132	5	5	11	360	240	340,5	–
NU438-M1	–	3	90,6	**190**	460	98	6	6	9,4	385	265	361,9	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

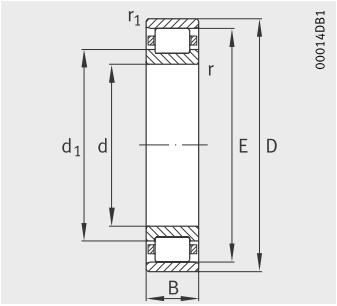


Mounting dimensions for NU

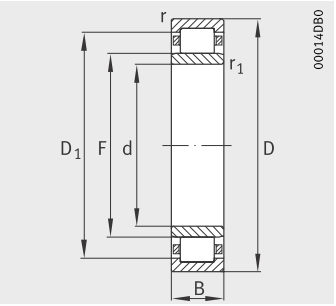
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
197	–	–	303	292	286	3	3	730	830	112	3 600	1 850
197	214	221	303	–	–	3	3	730	830	93	3 600	1 850
197	214	221	303	–	–	3	3	730	830	93	3 600	1 850
197	214	221	303	–	–	3	3	730	830	85	3 600	1 850
197	210	216	303	–	–	3	–	830	910	100	3 200	2 000
197	214	221	303	–	–	3	3	1 180	1 490	209	3 200	1 380
197	214	221	303	–	–	3	3	1 180	1 490	209	3 200	1 380
197	–	–	363	338	332	3	3	1 040	1 320	141	2 800	1 500
197	228	234	363	–	–	3	3	1 040	1 320	112	2 800	1 500
197	228	234	363	–	–	3	3	1 040	1 320	112	2 800	1 500
197	228	234	363	–	–	3	3	1 040	1 320	87	2 800	1 500
197	228	234	363	–	–	3	3	1 040	1 320	87	2 800	1 500
197	–	–	363	342	336	3	3	1 660	2 320	260	2 800	1 100
197	–	–	363	342	336	3	3	1 660	2 320	260	2 800	1 100
197	225	229	363	–	–	3	3	1 660	2 320	260	2 800	1 120
210	247	254	410	–	–	5	5	1 290	1 630	141	2 600	1 300
204	219	225	306	–	–	2,5	2,5	1 060	1 660	181	2 400	–
207	–	–	323	309	303	3	3	680	930	100	3 200	1 720
207	–	–	323	309	303	3	3	680	930	100	3 200	1 700
207	227	234	323	–	–	3	3	680	930	85	3 200	1 720
207	227	234	323	–	–	3	3	680	930	85	3 200	1 720
207	227	234	323	–	–	3	3	680	930	85	3 200	1 720
207	227	234	323	–	–	3	3	680	930	72	3 200	1 700
207	227	234	323	–	–	3	3	680	930	72	3 200	1 700
207	223	230	323	–	–	3	3	765	1 020	109	3 000	1 800
207	225	232	323	–	–	3	3	1 100	1 660	184	3 000	1 290
207	225	232	323	–	–	3	3	1 100	1 660	184	3 000	1 290
218	227	234	326	–	–	3	7	1 320	2 040	218	2 200	–
210	–	–	380	356	350	4	4	1 120	1 430	151	2 800	1 400
210	242	248	380	–	–	4	4	1 120	1 430	120	2 800	1 400
210	242	248	380	–	–	4	4	1 120	1 430	120	2 800	1 400
210	–	–	380	363	357	4	4	1 900	2 650	285	2 600	1 000
210	–	–	380	363	357	4	4	1 900	2 650	285	2 600	1 000
210	237,8	242,2	380	–	–	4	4	1 900	2 650	285	2 600	1 010
220	262	269	430	–	–	5	5	1 340	1 760	152	2 600	1 200

Cylindrical roller bearings with cage

Single row
Non-locating bearings



Design 1
N

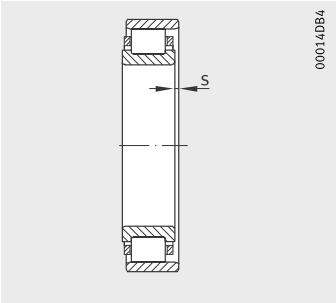


Design 3
NU

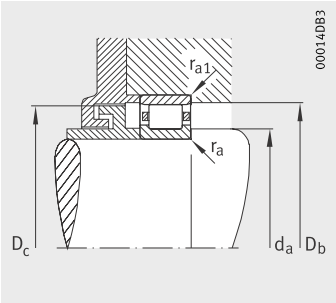
Dimension table (continued) · Dimensions in mm

Designation	Design	Mass	Dimensions									
		m	d	D	B	r	r_1	$s^{2)}$	E	F	D_1	d_1
		≈kg				min.	min.				≈	≈
NU3140-M1	3	42,4	**200**	340	112	3	3	10	313	233	300,2	–
N240-E-M1	1	27,2	**200**	360	58	4	4	4,8	323	–	–	257,6
NU240-E-M1	3	27,2	**200**	360	58	4	4	4,8	323	243	311,5	–
NU240-E-M1-C3	3	27,2	**200**	360	58	4	4	4,8	323	243	311,5	–
NU240-E-M1A	3	27,2	**200**	360	58	4	4	4,8	323	243	311,5	–
NU1240-M1	3	32,3	**200**	360	70	4	4	5	328	238	313,1	–
N2240-E-M1	1	44,7	**200**	360	98	4	4	8,2	325	–	–	256,3
N2240-E-MP1B	1	43,9	**200**	360	98	4	4	8,2	325	–	–	256,3
N2240-E-N-M1	$1^{1)}$	44,7	**200**	360	98	4	4	8,2	325	–	–	256,3
N2240-E-N-MP1B	$1^{1)}$	43,9	**200**	360	98	4	4	8,2	325	–	–	256,3
NU2240-E-M1	3	44,7	**200**	360	98	4	4	8,2	325	241	312,9	–
NU2240-E-M1A	3	45,7	**200**	360	98	4	4	8,2	325	241	312,9	–
NU2240-E-MPA	3	44,4	**200**	360	98	4	4	8,2	325	241	312,9	–
N340-E-M1	1	57	**200**	420	80	5	5	6,3	370	–	–	279
NU340-E-M1	3	57,3	**200**	420	80	5	5	6,3	370	258	351,8	–
NU340-E-M1A	3	57,3	**200**	420	80	5	5	6,3	370	258	351,8	–
NU340-E-MP1A	3	57	**200**	420	80	5	5	6,3	370	258	351,8	–
NU2340-EX-M1	3	95,6	**200**	420	138	5	5	11,3	377	253	356,9	–
NU440-M1	3	103	**200**	480	102	6	6	9,4	404	276	378,9	–

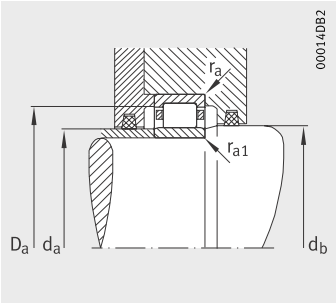
1) With retaining slot in outer ring.



[2] Axial displacement “s” for N and NU



Mounting dimensions for N

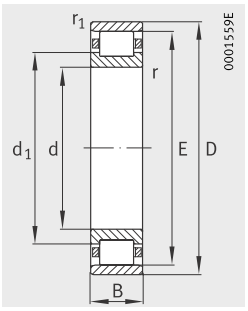


Mounting dimensions for NU

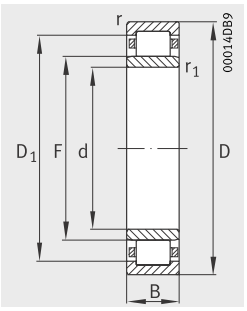
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
214	230	236	326	–	–	2,5	2,5	1 290	2 080	230	2 800	1 500
217	–	–	343	326	320	3	3	750	1 040	110	3 000	1 600
217	240	247	343	–	–	3	3	750	1 040	94	3 000	1 600
217	240	247	343	–	–	3	3	750	1 040	94	3 000	1 600
217	240	247	343	–	–	3	3	750	1 040	94	3 000	1 600
217	235	241	343	–	–	3	3	880	1 160	122	2 800	1 700
217	–	–	343	328	322	3	3	1 220	1 860	205	2 800	1 200
217	–	–	343	328	322	3	3	1 220	1 860	205	2 800	1 200
217	–	–	343	328	322	3	3	1 220	1 860	205	2 800	1 200
217	–	–	343	328	322	3	3	1 220	1 860	205	2 800	1 200
217	240	247	343	–	–	3	3	1 220	1 860	206	2 800	1 180
217	240	247	343	–	–	3	3	1 220	1 860	206	2 800	1 180
217	240	247	343	–	–	3	3	1 220	1 860	206	2 800	1 200
220	–	–	400	373	367	4	4	1 180	1 530	161	2 600	1 320
220	255	261	400	–	–	4	4	1 180	1 530	128	2 600	1 320
220	255	261	400	–	–	4	4	1 180	1 530	128	2 600	1 320
220	255	261	400	–	–	4	4	1 180	1 530	99	2 600	1 300
220	250,7	255,3	400	–	–	4	4	2 040	2 900	310	2 400	940
230	273	280	450	–	–	5	5	1 460	1 860	159	2 400	1 200

Cylindrical roller bearings with cage

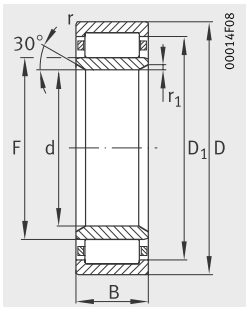
Single row
Non-locating bearings



Design 1
N



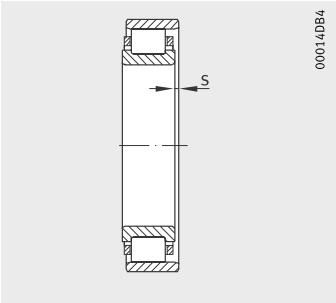
Design 3
NU, cylindrical or tapered bore



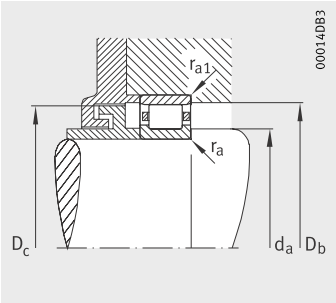
Design 4
NU

Dimension table (continued) · Dimensions in mm

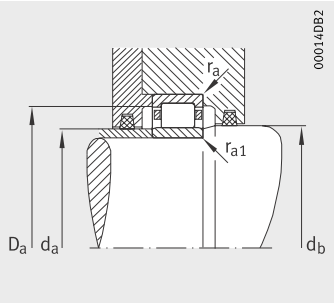
Designation	Design	Mass	Dimensions									
		m	d	D	B	r	r_1	$s^{1)}$	E	F	D_1	d_1
		≈kg				min.	min.				≈	≈
N1044-M1	1	20,4	**220**	340	56	3	3	6,2	310	–	–	261,7
N1044-M1B	1	18,8	**220**	340	56	3	3	6,2	310	–	–	261,7
NU1044-K-M1	3	18,3	**220**	340	56	3	–	6,2	310	250	298,9	–
NU1044-K-M1A	3	18,7	**220**	340	56	3	–	6,2	310	250	298,9	–
NU1044-M1	3	20,5	**220**	340	56	3	3	6,2	310	250	298,9	–
NU1044-M1-C3	3	20,5	**220**	340	56	3	3	6,2	310	250	298,9	–
NU1044-M1A	3	19	**220**	340	56	3	3	6,2	310	250	298,9	–
NU1044-MP1A	3	18,2	**220**	340	56	3	3	6,2	310	250	298,9	–
NU2044-E-M1	3	25,1	**220**	340	72	3	3	4	314	250	302,8	–
NU3044-M1	3	30,9	**220**	340	90	3	3	2,5	310	250	298,9	–
Z-546293.ZL	3	37,2	**220**	350	98	3	3	6,7	323	247	310,4	–
NU3144-M1	3	52,6	**220**	370	120	4	4	10,2	340	256	326,1	–
N244-E-M1	1	38,2	**220**	400	65	4	4	5,5	358	–	–	285,2
NU244-E-M1	3	38,1	**220**	400	65	4	4	5,5	358	268	344,9	–
NU244-E-M1A	3	38,1	**220**	400	65	4	4	5,5	358	268	344,9	–
NU244-E-MP1A	3	38,3	**220**	400	65	4	4	5,5	358	268	344,9	–
NU1244-M1	3	45,2	**220**	400	78	4	4	5,7	365	261	348	–
NU2244-EX-M1	3	61,6	**220**	400	108	4	4	8,4	367	259	349,4	–
NU2244-EX-M1A	3	62,8	**220**	400	108	4	4	8,4	367	259	349,4	–
NU2244-EX-MP1A	3	60,4	**220**	400	108	4	4	8,4	367	259	349,4	–
Z-548409.ZL	4	75,1	**220**	400	133	3	9,5	–	366,1	266,1	349,6	–
N344-E-M1	1	75,5	**220**	460	88	5	5	7	406	–	–	305,1
NU344-E-M1	3	75,5	**220**	460	88	5	5	7	406	282	386	–
NU344-E-M1A	3	75,5	**220**	460	88	5	5	7	406	282	386	–
NU2344-EX-M1	3	121	**220**	460	145	5	5	11,9	413	277	391,2	–
NU444-M1	3	150	**220**	540	115	6	6	10	455	305	426,1	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

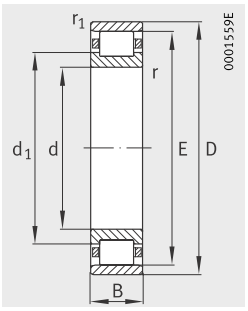


Mounting dimensions for NU

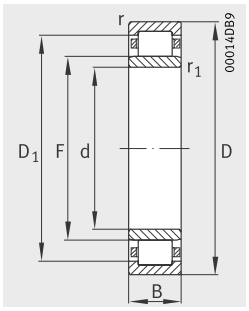
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
232	–	–	328	313	307	2,5	2,5	510	765	80	3 200	2 000
232	–	–	328	313	307	2,5	2,5	510	765	80	3 200	2 000
232	248	254	328	–	–	2,5	–	510	765	69	3 200	2 040
232	248	254	328	–	–	2,5	–	510	765	69	3 200	2 000
232	248	254	328	–	–	2,5	2,5	510	765	69	3 200	2 040
232	248	254	328	–	–	2,5	2,5	510	765	69	3 200	2 040
232	248	254	328	–	–	2,5	2,5	510	765	69	3 200	2 040
232	248	254	328	–	–	2,5	2,5	510	765	60	3 200	2 040
232	247	253	328	–	–	2,5	2,5	880	1 460	161	3 000	1 500
232	246	254	328	–	–	2,5	2,5	965	1 730	191	3 000	1 400
232	243	251	338	–	–	2,5	2,5	1 250	2 080	231	2 800	–
237	253	259	353	–	–	3	3	1 460	2 400	265	2 800	1 300
237	–	–	383	361	355	3	3	950	1 320	135	2 800	1 400
237	265	271	383	–	–	3	3	950	1 320	109	2 800	1 380
237	265	271	383	–	–	3	3	950	1 320	109	2 800	1 380
237	265	271	383	–	–	3	3	950	1 320	87	2 800	1 400
237	257	264	383	–	–	3	3	1 080	1 430	150	2 800	1 500
237	256,7	261,3	383	–	–	3	3	1 630	2 360	250	2 600	1 000
237	256,7	261,3	383	–	–	3	3	1 630	2 360	250	2 600	1 000
237	256,7	261,3	383	–	–	3	3	1 630	2 360	250	2 600	1 000
260	263	269	386	–	–	2,5	8	1 900	3 000	320	2 600	1 100
240	–	–	440	409	403	4	4	1 430	1 900	192	2 400	1 100
240	279	285	440	–	–	4	4	1 430	1 900	152	2 400	1 140
240	279	285	440	–	–	4	4	1 430	1 900	152	2 400	1 140
240	274,7	279,3	440	–	–	4	4	2 360	3 350	340	2 200	830
250	302	309	510	–	–	5	5	1 960	2 550	209	2 200	950

Cylindrical roller bearings with cage

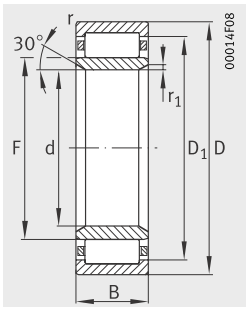
Single row
Non-locating bearings



Design 1
N



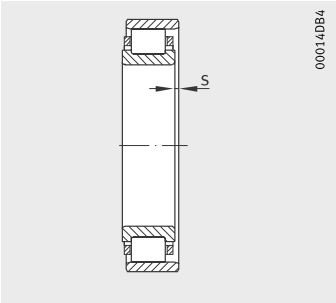
Design 3
NU, cylindrical or tapered bore



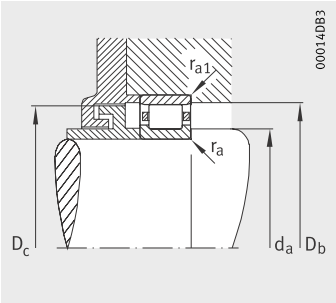
Design 4
NU

Dimension table (continued) · Dimensions in mm

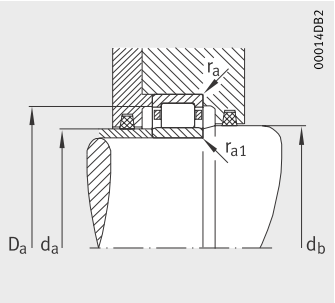
Designation	Design	Mass	Dimensions									
		m	d	D	B	r	r_1	$s^{1)}$	E	F	D_1	d_1
		≈kg				min.	min.				≈	≈
NU1948-M1	3	8,37	**240**	320	38	2,1	1,5	4,6	299	261	292,6	–
NU3948-E-M1	3	13,6	**240**	320	60	2,1	1,5	3,2	302	260	295	–
NU3948-E-MP1A	3	13,5	**240**	320	60	2,1	1,5	5,3	302	260	295	–
N1048-M1	1	19,8	**240**	360	56	3	3	6,4	330	–	–	281,6
N1048-M1B	1	20	**240**	360	56	3	3	6,4	330	–	–	281,6
NU1048-K-M1	3	20	**240**	360	56	3	–	6,4	330	270	318,9	–
NU1048-M1	3	19,9	**240**	360	56	3	3	6,4	330	270	318,9	–
NU1048-M1-C3	3	19,9	**240**	360	56	3	3	6,4	330	270	318,9	–
NU1048-M1A	3	20,2	**240**	360	56	3	3	6,4	330	270	318,9	–
NU1048-MP1A	3	19,2	**240**	360	56	3	3	6,4	330	270	318,9	–
NU2048-E-M1	3	26,6	**240**	360	72	3	3	1,9	334	270	322,8	–
NU3048-M1	3	33,6	**240**	360	92	3	3	9,8	330	270	318,9	–
NU3148-M1	3	64,8	**240**	400	128	4	4	12	368	278	353,2	–
N248-E-M1	1	51,5	**240**	440	72	4	4	6	393	–	–	312
NU248-E-M1	3	51,8	**240**	440	72	4	4	6	393	293	376,6	–
NU248-E-M1A	3	51,8	**240**	440	72	4	4	6	393	293	376,6	–
NU1248-M1	3	60,4	**240**	440	85	4	4	6,5	399	287	380,8	–
NU2248-EX-M1	3	82,8	**240**	440	120	4	4	10,2	399	287	380,7	–
NU2248-EX-M1A	3	84,3	**240**	440	120	4	4	10,2	399	287	380,7	–
NU2248-EX-MPA	3	83,3	**240**	440	120	4	4	10,2	399	287	380,7	–
Z-548410.ZL	4	102	**240**	440	146	3	9,5	–	401,4	291,4	383,4	–
NU348-E-M1	3	95,7	**240**	500	95	5	5	7,4	442	306	421,2	–
NU2348-EX-M1	3	151	**240**	500	155	5	5	13,3	447	303	424	–
NU448-M1	3	176	**240**	580	122	6	6	10,9	490	330	459,1	–
Z-544518.ZL	3	54,1	**241**	375	127	10	4	–	342,5	282,5	332,6	–
Z-549124.ZL	3	59,7	**250**	410	111	4	4	–	378	282	362,3	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

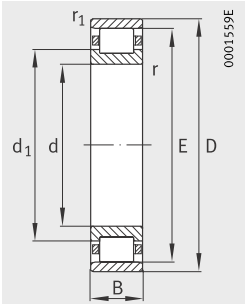


Mounting dimensions for NU

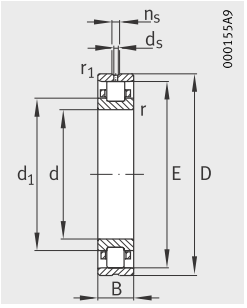
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
248	258	264	309	–	–	2	1,5	330	490	44	3 800	–
248	257	263	309	–	–	2	1,5	700	1 200	130	3 200	1 400
248	257	263	309	–	–	2	1,5	700	1 200	130	3 200	1 400
252	–	–	348	333	327	2,5	2,5	540	850	86	3 000	1 800
252	–	–	348	333	327	2,5	2,5	540	850	86	3 000	1 800
252	268	275	348	–	–	2,5	–	540	850	64	3 000	1 800
252	268	275	348	–	–	2,5	2,5	540	850	74	3 000	1 850
252	268	275	348	–	–	2,5	2,5	540	850	74	3 000	1 850
252	268	275	348	–	–	2,5	2,5	540	850	74	3 000	1 850
252	268	275	348	–	–	2,5	2,5	540	850	64	3 000	1 850
252	269	275	348	–	–	2,5	2,5	915	1 600	172	2 800	1 400
252	266	274	348	–	–	2,5	2,5	1 000	1 900	205	2 800	1 300
257	275	281	383	–	–	3	3	1 660	2 800	295	2 600	1 100
257	–	–	423	396	390	3	3	1 140	1 600	163	2 600	1 220
257	290	296	423	–	–	3	3	1 140	1 600	132	2 600	1 220
257	290	296	423	–	–	3	3	1 140	1 600	132	2 600	1 220
257	284,5	289,5	423	–	–	3	3	1 290	1 760	183	2 400	1 300
257	284,5	289,5	423	–	–	3	3	1 830	2 800	295	2 400	900
257	284,5	289,5	423	–	–	3	3	1 830	2 800	295	2 400	900
257	284,5	289,5	423	–	–	3	3	1 830	2 800	295	2 400	900
280	288	294	426	–	–	2,5	8	2 240	3 600	380	2 400	1 000
260	303	309	480	–	–	4	4	1 730	2 280	176	2 200	1 000
260	300,5	305,5	480	–	–	4	4	2 600	3 750	375	2 000	750
270	327	334	550	–	–	5	5	2 240	2 900	198	1 900	850
258	279	285	340	–	–	8	3	1 400	2 900	215	1 800	–
267	279	285	393	–	–	3	3	1 630	2 600	270	2 600	1 100

Cylindrical roller bearings with cage

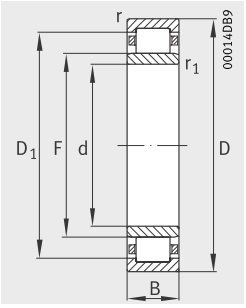
Single row
Non-locating bearings



Design 1
N



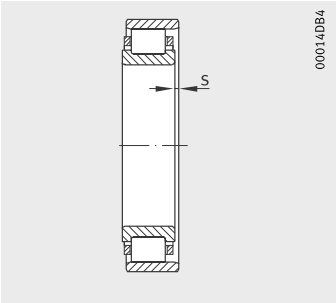
Design 2
N with lubrication groove and holes



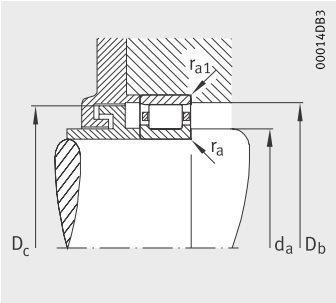
Design 3
NU, cylindrical or tapered bore

Dimension table (continued) · Dimensions in mm

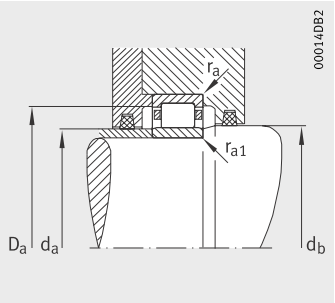
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	$s^{1)}$	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
Z-541924.ZL	2	4,62	**260**	320	28	2	1,1	5	306	–	–	284	2	6,5
NU1852-M1	3	4,83	**260**	320	28	2	1,1	3,2	307	275	300,6	–	–	–
NU3852-M1	3	7,9	**260**	320	45	2	1,1	4,6	307	275	300,6	–	–	–
NU1952-M1	3	14,2	**260**	360	46	2,1	1,5	5,3	334	286	324,4	–	–	–
NU3952-E-M1	3	23,1	**260**	360	75	2,1	1,5	4,3	338	286	329,3	–	–	–
N1052-M1	1	29,4	**260**	400	65	4	4	7,2	364	–	–	309,1	–	–
N1052-M1B	1	29,9	**260**	400	65	4	4	7,2	364	–	–	309,1	–	–
NU1052-K-M1	3	29,2	**260**	400	65	4	–	7,2	364	296	351,3	–	–	–
NU1052-M1	3	29,7	**260**	400	65	4	4	7,2	364	296	351,3	–	–	–
NU1052-M1-C3	3	29,7	**260**	400	65	4	4	7,2	364	296	351,3	–	–	–
NU1052-M1A	3	29,9	**260**	400	65	4	4	7,2	364	296	351,3	–	–	–
NU1052-MP1A	3	29	**260**	400	65	4	4	7,2	364	296	351,3	–	–	–
NU2052-E-M1	3	39,5	**260**	400	82	4	4	6,2	370	294	356,3	–	–	–
NU3052-M1	3	49,3	**260**	400	104	4	4	9,7	364	296	351,3	–	–	–
NU3152-M1	3	89,7	**260**	440	144	4	4	13,5	404	304	388,2	–	–	–
NU252-E-M1	3	68,4	**260**	480	80	5	5	6,2	429	317	410,8	–	–	–
NU252-E-M1A	3	68,4	**260**	480	80	5	5	6,2	429	317	410,8	–	–	–
NU1252-M1	3	77	**260**	480	90	5	5	6,7	433	313	413,6	–	–	–
NU2252-E-M1	3	109	**260**	480	130	5	5	10,5	433	313	413,6	–	–	–
NU2252-E-M1A	3	111	**260**	480	130	5	5	10,5	433	313	413,6	–	–	–
NU2252-E-MP1A	3	108	**260**	480	130	5	5	10,5	433	313	413,6	–	–	–
NU352-E-M1	3	121	**260**	540	102	6	6	10	477	337	454,6	–	–	–
NU2352-EX-M1	3	189	**260**	540	165	6	6	13,7	484	324	458,4	–	–	–
Z-547407.ZL	1	12,8	**279**	368	44	4	4	4	348	–	–	306,1	–	–
NU1856-M1	3	7,1	**280**	350	33	2	1,1	4	333	299	327,1	–	–	–
NU1956-M1	3	15	**280**	380	46	2,1	1,5	5,2	354	306	345,4	–	–	–
NU3956-E-M1	3	24,8	**280**	380	75	2,1	1,5	6,6	358	306	349,3	–	–	–
N1056-M1	1	31,3	**280**	420	65	4	4	7,2	384	–	–	329,1	–	–
N1056-M1B	1	31,3	**280**	420	65	4	4	7,2	384	–	–	329,1	–	–
NU1056-M1	3	31,4	**280**	420	65	4	4	7,2	384	316	371,3	–	–	–
NU1056-M1-C3	3	31,4	**280**	420	65	4	4	7,2	384	316	371,3	–	–	–
NU1056-M1A	3	31,7	**280**	420	65	4	4	7,2	384	316	371,3	–	–	–
NU1056-MP1A	3	30,9	**280**	420	65	4	4	7,2	384	316	371,3	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

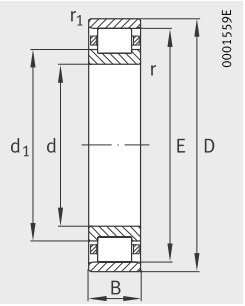


Mounting dimensions for NU

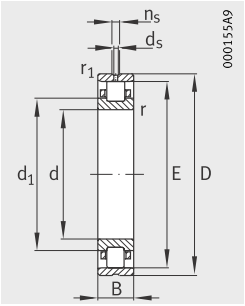
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
269	–	–	311	310	302	2	1,1	106	176	13,5	3 800	–
269	272	278	311	–	–	2	1	270	440	39	3 600	–
269	272	278	311	–	–	2	1	485	930	100	3 200	1 300
268	283	289	349	–	–	2	1,5	425	735	64	3 000	–
268	283	289	349	–	–	2	1,5	830	1 660	179	2 800	1 200
275	–	–	385	366,5	361,5	3	3	655	1 020	104	2 800	1 700
275	–	–	385	366,5	361,5	3	3	655	1 020	104	2 800	1 700
275	292	300	385	–	–	3	–	655	1 020	90	2 800	1 690
275	292	300	385	–	–	3	3	655	1 020	90	2 800	1 690
275	292	300	385	–	–	3	3	655	1 020	90	2 800	1 690
275	292	300	385	–	–	3	3	655	1 020	90	2 800	1 690
275	292	300	385	–	–	3	3	655	1 020	77	2 800	1 690
275	291	297	385	–	–	3	3	1 200	2 080	217	2 600	1 200
275	292	300	385	–	–	3	3	1 270	2 400	255	2 800	1 100
277	301	307	423	–	–	3	3	2 040	3 400	355	2 400	1 000
280	314	320	460	–	–	4	4	1 340	1 900	154	2 400	1 110
280	314	320	460	–	–	4	4	1 340	1 900	154	2 400	1 110
280	310	316	460	–	–	4	4	1 460	2 040	204	2 200	1 100
280	310	316	460	–	–	4	4	2 160	3 350	345	2 200	780
280	310	316	460	–	–	4	4	2 160	3 350	345	2 200	780
280	310	316	460	–	–	4	4	2 160	3 350	345	2 200	800
286	334,3	339,7	514	–	–	5	5	1 900	2 600	198	2 000	900
286	321,3	326,7	514	–	–	5	5	3 100	4 500	435	1 800	660
294	–	–	353	351	345	3	3	490	850	87	2 800	–
289	296	302	341	–	–	2	1	255	500	43	3 200	–
288	303	309	369	–	–	2	1,5	440	800	68	2 800	–
288	303	309	369	–	–	2	1,5	865	1 760	188	2 800	1 100
295	–	–	405	386	382	3	3	680	1 100	112	2 800	1 500
295	–	–	405	386	382	3	3	680	1 100	112	2 800	1 500
295	312	321	405	–	–	3	3	680	1 100	96	2 800	1 550
295	312	321	405	–	–	3	3	680	1 100	96	2 800	1 550
295	312	321	405	–	–	3	3	680	1 100	96	2 800	1 550
295	312	321	405	–	–	3	3	695	1 140	86	2 800	1 530

Cylindrical roller bearings with cage

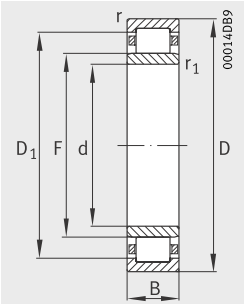
Single row
Non-locating bearings



Design 1
N



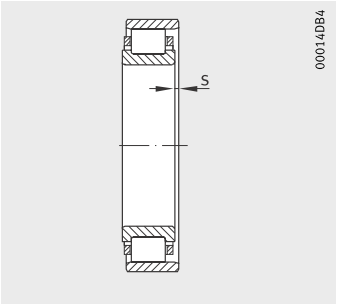
Design 2
N with lubrication groove and holes



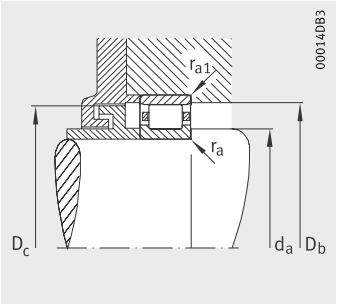
Design 3
NU

Dimension table (continued) · Dimensions in mm

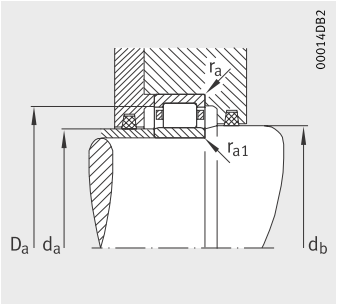
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	$s^{1)}$	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU2056-E-M1	3	41,8	**280**	420	82	4	4	6,2	390	314	376,3	–	–	–
NU3056-M1	3	53,2	**280**	420	106	4	4	9,8	384	316	371,3	–	–	–
NU3156-M1	3	96,6	**280**	460	146	5	5	14	424	324	407,6	–	–	–
NU256-E-M1	3	72,1	**280**	500	80	5	5	6,3	449	337	430,8	–	–	–
NU256-E-M1A	3	72,1	**280**	500	80	5	5	6,3	449	337	430,8	–	–	–
NU1256-M1	3	81,2	**280**	500	90	5	5	6,7	453	333	434	–	–	–
NU2256-E-M1	3	114	**280**	500	130	5	5	10,5	453	333	436	–	–	–
NU2256-E-M1A	3	118	**280**	500	130	5	5	10,5	453	333	436	–	–	–
NU2256-E-MP1A	3	113	**280**	500	130	5	5	10,5	453	333	436	–	–	–
NU356-E-M1	3	147	**280**	580	108	6	6	8,7	512	362	488	–	–	–
NU2356-EX-M1	3	234	**280**	580	175	6	6	13,8	521	351	493,8	–	–	–
Z-527791.ZL	2	9,65	**300**	380	38	2,1	2,1	7	362	–	–	329,9	3,2	9,5
NU1860-M1	3	9,96	**300**	380	38	2,1	1,5	4,3	362	322	355,2	–	–	–
N2860-M1	1	12,8	**300**	380	48	2,1	1,5	5,3	362	–	–	328,7	–	–
NU2860-M1	3	12,9	**300**	380	48	2,1	1,5	5,3	362	322	355,2	–	–	–
NU3860-M1	3	16,4	**300**	380	60	2,1	1,5	6	362	322	355,2	–	–	–
NU1960-M1	3	23,7	**300**	420	56	3	3	6,5	390	330	378	–	–	–
NU3960-E-M1	3	38,6	**300**	420	90	3	3	7,5	394	330	383,3	–	–	–
NU3960-E-M1A	3	38,6	**300**	420	90	3	3	7,5	394	330	383,3	–	–	–
N1060-M1	1	44,3	**300**	460	74	4	4	7,9	420	–	–	355,7	–	–
NU1060-M1	3	44,6	**300**	460	74	4	4	7,9	420	340	405,2	–	–	–
NU1060-M1-C3	3	44,6	**300**	460	74	4	4	7,9	420	340	405,2	–	–	–
NU1060-M1A	3	44,6	**300**	460	74	4	4	7,9	420	340	405,2	–	–	–
NU1060-MP1A	3	43,5	**300**	460	74	4	4	7,9	420	340	405,2	–	–	–
NU3060-M1	3	74	**300**	460	118	4	4	10,5	420	340	405,2	–	–	–
NU3160-M1	3	126	**300**	500	160	5	5	4,2	460	348	442,4	–	–	–
NU260-E-M1	3	90,4	**300**	540	85	5	5	6,9	484	364	464,6	–	–	–
NU260-E-M1A	3	90,4	**300**	540	85	5	5	6,9	484	364	464,6	–	–	–
NU1260-M1	3	103	**300**	540	98	5	5	7,2	487	359	466,4	–	–	–
NU2260-EX-MPA	3	147	**300**	540	140	5	5	12,2	495	355	472,6	–	–	–
NU2260-EX-M1	3	143	**300**	540	140	5	5	12,2	495	355	472,6	–	–	–
NU2260-EX-M1A	3	143	**300**	540	140	5	5	12,2	495	355	472,6	–	–	–
NU360-E-M1	3	171	**300**	620	109	7,5	7,5	8,9	542	392	518	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

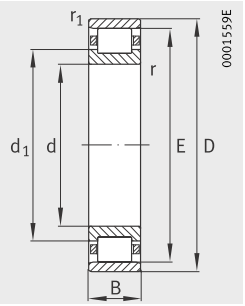


Mounting dimensions for NU

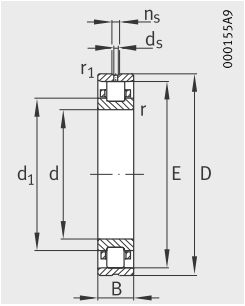
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
295	311	317	405	–	–	3	3	1 220	2 160	224	2 600	1 100
295	312	320	405	–	–	3	3	1 340	2 600	275	2 600	1 000
300	321	327	440	–	–	4	4	2 080	3 650	370	2 200	950
300	334	340	480	–	–	4	4	1 400	2 000	163	2 200	1 020
300	334	340	480	–	–	4	4	1 400	2 000	163	2 200	1 020
300	330	336	480	–	–	4	4	1 530	2 200	215	2 200	1 000
300	330	336	480	–	–	4	4	2 280	3 600	360	2 000	720
300	330	336	480	–	–	4	4	2 280	3 600	360	2 000	720
300	330	336	480	–	–	4	4	2 280	3 600	360	2 000	700
306	359	366	554	–	–	5	5	2 160	3 050	224	1 900	790
306	348	354	554	–	–	5	5	3 550	5 200	495	1 600	590
310	–	–	370	366	358	2,1	2,1	204	325	25	2 800	–
310	319	325	370	–	–	2	1,5	335	640	55	2 800	–
310	–	–	370	366	358	2	1,5	475	1 000	101	2 800	1 200
310	319	325	370	–	–	2	1,5	475	1 000	101	2 800	1 200
310	319	325	370	–	–	2	1,5	610	1 400	143	2 800	1 100
312	327	333	408	–	–	2,5	2,5	600	1 020	87	2 800	–
312	327	333	408	–	–	2,5	2,5	1 180	2 360	242	2 600	950
312	327	333	408	–	–	2,5	2,5	1 180	2 360	242	2 600	950
315	–	–	445	422	418	3	3	900	1 430	139	2 400	1 400
315	336	345	445	–	–	3	3	900	1 430	120	2 400	1 390
315	336	345	445	–	–	3	3	900	1 430	120	2 400	1 390
315	336	345	445	–	–	3	3	900	1 430	120	2 400	1 390
315	336	345	445	–	–	3	3	900	1 430	105	2 400	1 390
315	336	344	445	–	–	3	3	1 700	3 250	335	2 400	900
320	345	351	480	–	–	4	4	2 500	4 300	435	2 000	850
320	359	367	520	–	–	4	4	1 600	2 320	182	2 000	920
320	359	367	520	–	–	4	4	1 600	2 320	182	2 000	920
320	–	–	520	491	483	4	4	1 730	2 500	242	2 000	950
320	352	358	520	–	–	4	4	2 550	3 900	375	1 200	670
320	352	358	520	–	–	4	4	2 700	4 150	395	1 900	650
320	352	358	520	–	–	4	4	2 700	4 150	395	1 900	650
332	389	395	588	–	–	6	6	2 280	3 250	238	1 800	750

Cylindrical roller bearings with cage

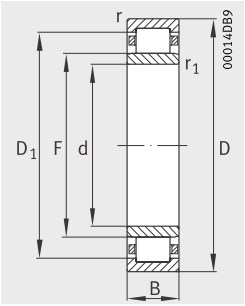
Single row
Non-locating bearings



Design 1
N



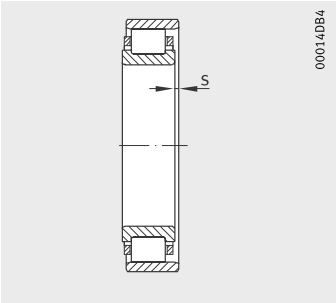
Design 2
N with lubrication groove and holes



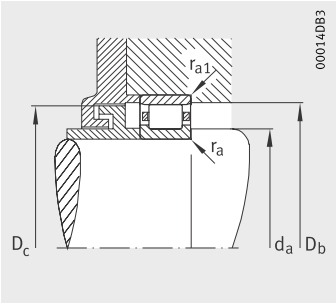
Design 3
NU

Dimension table (continued) · Dimensions in mm

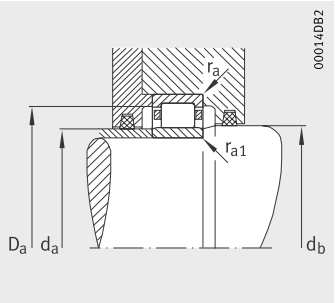
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	$s^{1)}$	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
Z-527454.ZL	2	10,2	**320**	400	38	2	2	7	381	–	–	349	3,2	9,5
NU1864-M1	3	10,8	**320**	400	38	2,1	1,5	4,3	381	341	373,8	–	–	–
NU3864-M1	3	17,5	**320**	400	60	2,1	1,5	6	381	341	373,8	–	–	–
NU1964-M1	3	25,1	**320**	440	56	3	3	6,2	410	350	398	–	–	–
NU2964-M1	3	33,2	**320**	440	72	3	3	7	410	350	398	–	–	–
NU3964-E-M1	3	41,5	**320**	440	90	3	3	4,7	414	350	403,3	–	–	–
N1064-M1	1	46,5	**320**	480	74	4	4	8	440	–	–	375,4	–	–
NU1064-M1	3	46,9	**320**	480	74	4	4	8	440	360	425,1	–	–	–
NU1064-M1-C3	3	46,9	**320**	480	74	4	4	8	440	360	425,1	–	–	–
NU1064-M1A	3	46,9	**320**	480	74	4	4	8	440	360	425,1	–	–	–
NU1064-MP1A	3	45,8	**320**	480	74	4	4	8	440	360	425,1	–	–	–
NU3064-M1	3	79,3	**320**	480	121	4	4	11,5	440	360	425,1	–	–	–
NU3164-M1	3	168	**320**	540	176	5	5	12	496	368	475,4	–	–	–
NU264-EX-M1	3	113	**320**	580	92	5	5	7,5	520	392	499,4	–	–	–
NU264-EX-M1A	3	113	**320**	580	92	5	5	7,5	520	392	499,4	–	–	–
NU1264-M1	3	130	**320**	580	105	5	5	7,3	523	383	500,6	–	–	–
NU2264-EX-M1	3	180	**320**	580	150	5	5	11,9	530	380	506	–	–	–
NU2264-EX-M1A	3	184	**320**	580	150	5	5	11,9	530	380	506	–	–	–
NU364-E-M1	3	214	**320**	670	112	7,5	7,5	8,9	580	420	554	–	–	–
NU2364-E-M1	3	356	**320**	670	200	7,5	7,5	16	602	402	570	–	–	–
Z-527455.ZL	2	10,6	**340**	420	38	2,1	2,1	7	401,5	–	–	369,3	3,2	9,5
NU1868-M1	3	11,3	**340**	420	38	2,1	1,5	4,3	401,5	361,5	394,7	–	–	–
NU3868-M1	3	18,4	**340**	420	60	2,1	1,5	6	401,5	361,5	394,7	–	–	–
NU1968-M1	3	27,2	**340**	460	56	3	3	6,5	430	370	418	–	–	–
NU2968-M1	3	34,6	**340**	460	72	3	3	7	430	370	418	–	–	–
NU3968-E-M1	3	43,8	**340**	460	90	3	3	4,7	434	370	423,3	–	–	–
NU1068-MPA	3	65,1	**340**	520	82	5	5	8,9	475	385	458,2	–	–	–
N1068-M1	1	62,8	**340**	520	82	5	5	8,9	475	–	–	402,2	–	–
NU1068-M1	3	63,2	**340**	520	82	5	5	8,9	475	385	458,2	–	–	–
NU1068-M1-C3	3	63,2	**340**	520	82	5	5	8,9	475	385	458,2	–	–	–
NU1068-M1A	3	63,2	**340**	520	82	5	5	8,9	475	385	458,2	–	–	–
NU3168-M1A	3	209	**340**	580	190	5	5	17,3	527	399	507,2	–	–	–
NU268-E-M1	3	133	**340**	620	92	6	6	7,4	547	419	526,4	–	–	–
NU1268-M1	3	165	**340**	620	118	6	6	8,3	558	408	534	–	–	–
NU2268-E-M1	3	229	**340**	620	165	6	6	13,3	558	408	534	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

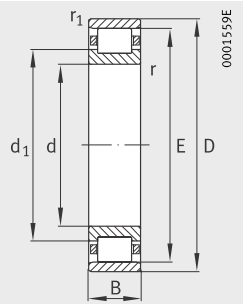


Mounting dimensions for NU

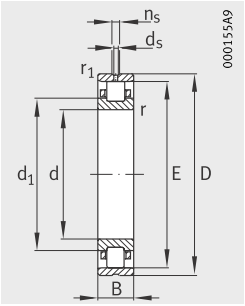
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
329	–	–	391	385	377	2	2	212	360	27	2 800	–
330	338	344	390	–	–	2	1,5	345	695	58	2 800	–
330	338	344	390	–	–	2	1,5	630	1 500	151	2 800	1 000
332	346	354	428	–	–	2,5	2,5	620	1 100	91	2 600	–
332	346	354	428	–	–	2,5	2,5	915	1 800	181	2 400	1 100
332	346	354	428	–	–	2,5	2,5	1 220	2 550	255	2 400	900
335	–	–	465	443	437	3	3	915	1 500	144	2 400	1 300
335	356	365	465	–	–	3	3	915	1 500	124	2 400	1 300
335	356	365	465	–	–	3	3	915	1 500	124	2 400	1 300
335	356	365	465	–	–	3	3	915	1 500	124	2 400	1 300
335	356	365	465	–	–	3	3	915	1 500	108	2 400	1 300
335	356	364	465	–	–	3	3	1 760	3 450	345	2 200	850
340	364	372	520	–	–	4	4	3 250	5 600	550	1 900	700
340	388,5	395,5	560	–	–	4	4	1 800	2 700	204	1 900	830
340	388,5	395,5	560	–	–	4	4	1 800	2 700	204	1 900	830
340	380	386	560	–	–	4	4	2 080	3 000	280	1 900	850
340	376,5	383,5	560	–	–	4	4	3 150	4 900	460	1 600	570
340	376,5	383,5	560	–	–	4	4	3 150	4 900	460	1 600	560
352	416	424	638	–	–	6	6	2 550	3 750	265	1 600	650
352	398	405	638	–	–	6	6	4 550	6 800	620	1 400	480
350	–	–	410	405	398	2,1	2,1	212	360	26,5	2 800	–
350	358	365	410	–	–	2,1	1,5	360	735	61	2 800	–
350	358	365	410	–	–	2	1,5	640	1 560	156	2 600	950
352	366	374	448	–	–	2,5	2,5	640	1 160	96	2 600	–
352	366	374	448	–	–	2,5	2,5	950	1 930	190	2 400	950
352	366	374	448	–	–	2,5	2,5	1 250	2 600	260	2 400	850
357	381	390	503	–	–	4	4	1 080	1 760	141	2 200	1 200
357	–	–	503	478,5	471,5	4	4	1 120	1 830	169	2 200	1 200
357	381	390	503	–	–	4	4	1 120	1 830	147	2 200	1 190
357	381	390	503	–	–	4	4	1 120	1 830	147	2 200	1 190
357	381	390	503	–	–	4	4	1 120	1 830	147	2 200	1 190
360	395	403	560	–	–	4	4	3 200	5 600	540	1 800	700
366	415	423	594	–	–	5	5	1 930	3 000	225	1 800	750
366	404	412	594	–	–	5	5	2 360	3 450	315	1 800	800
366	404	412	594	–	–	5	5	3 450	5 700	540	1 500	520

Cylindrical roller bearings with cage

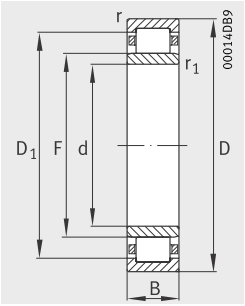
Single row
Non-locating bearings



Design 1
N



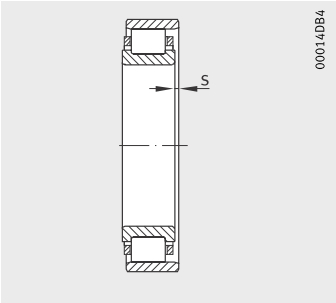
Design 2
N with lubrication groove and holes



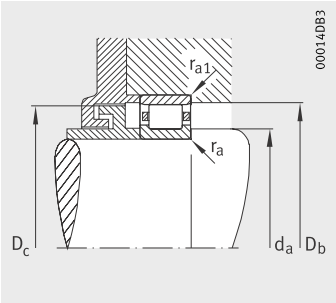
Design 3
NU

Dimension table (continued) · Dimensions in mm

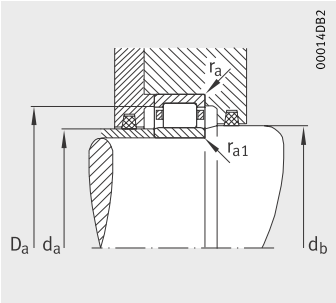
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[1)]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU2268-E-M1A	3	233	**340**	620	165	6	6	13,3	558	408	534	–	–	–
NU368-E-M1	3	247	**340**	710	118	7,5	7,5	9,7	614,4	450,4	588	–	–	–
NU2368-E-M1	3	419	**340**	710	212	7,5	7,5	15,5	635	425	601,4	–	–	–
Z-527456.ZL	2	11,2	**360**	440	38	2,1	2,1	7	421,5	–	–	389,4	3,2	9,5
NU1872-M1	3	12	**360**	440	38	2,1	1,5	4,3	421,5	381,5	414,7	–	–	–
NU3872-M1	3	19,4	**360**	440	60	2,1	1,5	6	421,5	381,5	414,7	–	–	–
NU1972-M1	3	27,7	**360**	480	56	3	3	6,2	450	390	438,5	–	–	–
NU2972-M1	3	37,2	**360**	480	72	3	3	4	450	390	440	–	–	–
NU3972-E-M1	3	45,6	**360**	480	90	3	3	4,7	454	390	443,3	–	–	–
N1072-M1	1	65,3	**360**	540	82	5	5	8,9	495	–	–	421,6	–	–
NU1072-M1	3	65,9	**360**	540	82	5	5	8,9	495	405	478,1	–	–	–
NU1072-M1-C3	3	65,9	**360**	540	82	5	5	8,9	495	405	478,1	–	–	–
NU1072-M1A	3	65,9	**360**	540	82	5	5	8,9	495	405	478,1	–	–	–
NU1072-MP1A	3	64,2	**360**	540	82	5	5	8,9	495	405	478,1	–	–	–
NU1072-MPA	3	64,2	**360**	540	82	5	5	8,9	495	405	478,1	–	–	–
NU3072-M1	3	112	**360**	540	134	5	5	11,5	495	405	478,1	–	–	–
NU3172-M1	3	220	**360**	600	192	5	5	19	548	420	527	–	–	–
NU272-E-M1	3	149	**360**	650	95	6	6	9,5	579	451	558,5	–	–	–
NU272-E-M1A	3	151	**360**	650	95	6	6	9,5	579	451	558,5	–	–	–
NU1272-M1	3	187	**360**	650	122	6	6	8,2	589	429	563,5	–	–	–
NU2272-E-M1	3	254	**360**	650	170	6	6	15	588	428	562	–	–	–
NU2272-E-M1A	3	258	**360**	650	170	6	6	15	588	428	562	–	–	–
NU2372-E-M1	3	498	**360**	750	224	7,5	7,5	19	665	445	630	–	–	–
NU2372-E-M1A	3	498	**360**	750	224	7,5	7,5	19	665	445	630	–	–	–
Z-526718.ZL	2	18,8	**380**	480	46	2,1	2,1	8,5	455,5	–	–	415,5	3,2	9,5
N1876-M1	1	19,1	**380**	480	46	2,1	2,1	5,3	455,5	–	–	415,5	–	–
NU1876-M1	3	19,2	**380**	480	46	2,1	2,1	5,3	455,5	407,5	447,4	–	–	–
N2876-M1	1	25,3	**380**	480	60	2,1	2,1	6,9	455,5	–	–	415,5	–	–
NU2876-M1	3	25,4	**380**	480	60	2,1	2,1	6,9	455,5	407,5	447,4	–	–	–
NU3876-M1	3	32,5	**380**	480	75	2,1	2,1	7,8	455,5	407,5	447,4	–	–	–
NU1976-M1	3	40,7	**380**	520	65	4	4	6	484	416	472,7	–	–	–
N2976-M1	3	52,5	**380**	520	82	4	4	7,2	486	–	–	425,9	–	–
NU2976-M1	3	52,9	**380**	520	82	4	4	7,2	486	414	471,6	–	–	–
NU2976-MP1A	3	52,3	**380**	520	82	4	4	7,2	486	414	471,6	–	–	–
NU3976-E-M1	3	67	**380**	520	106	4	4	8,7	490	414	474,8	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

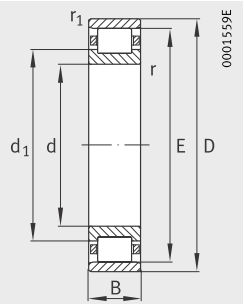


Mounting dimensions for NU

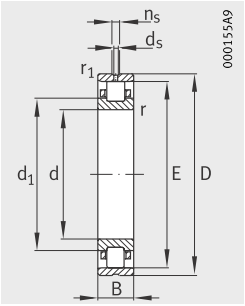
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
366	404	412	594	–	–	5	5	3 450	5 700	540	1 500	520
372	447	454	678	–	–	6	6	2 750	4 150	290	1 500	600
372	421,5	428,5	678	–	–	6	6	5 000	7 350	660	1 400	450
370	–	–	430	425	418	2,1	2,1	220	390	28	2 600	–
370	378	385	430	–	–	2	1,5	365	765	62	2 600	–
370	378	385	430	–	–	2	1,5	670	1 660	163	2 400	900
372	386	394	468	–	–	2,5	2,5	655	1 220	100	2 400	–
372	386	394	468	–	–	2,5	2,5	980	2 040	199	2 200	900
372	386	394	468	–	–	2,5	2,5	1 290	2 800	275	2 200	800
378	–	–	523	499	491	4	4	1 140	1 900	175	2 400	1 300
377	400	410	523	–	–	4	4	1 140	1 900	151	2 200	1 110
377	400	410	523	–	–	4	4	1 140	1 900	151	2 200	1 110
377	400	410	523	–	–	4	4	1 140	1 900	151	2 200	1 110
377	400	410	523	–	–	4	4	1 140	1 900	133	2 200	1 110
377	400	410	523	–	–	4	4	1 140	1 900	133	2 200	1 110
377	400	410	523	–	–	4	4	2 200	4 400	420	2 000	670
380	416	424	580	–	–	4	4	3 350	6 000	570	1 600	630
386	447	455	624	–	–	5	5	2 000	3 150	234	1 600	700
386	447	455	624	–	–	5	5	2 000	3 150	234	1 600	700
386	425	433	624	–	–	5	5	2 700	4 000	345	1 600	700
386	424	432	624	–	–	5	5	3 600	5 700	520	1 400	510
386	424	432	624	–	–	5	5	3 600	5 700	520	1 400	510
392	441	449	718	–	–	6	6	5 500	8 300	730	1 300	400
392	441	449	718	–	–	6	6	5 500	8 300	730	1 300	400
390	–	–	470	460	451	2,1	2,1	285	480	34,5	2 400	–
390	–	–	470	460	451	2	2	490	1 000	91	2 400	–
390	404	411	470	–	–	2	2	490	1 000	81	2 400	–
390	–	–	470	460	451	2	2	695	1 560	148	2 200	900
390	404	411	470	–	–	2	2	695	1 560	148	2 200	900
390	404	411	470	–	–	2	2	900	2 160	208	2 200	800
395	412	420	505	–	–	3	3	815	1 500	124	2 200	–
395	–	–	505	490	482	3	3	1 320	2 700	255	2 000	800
395	410	418	505	–	–	3	3	1 320	2 700	260	2 000	800
395	410	418	505	–	–	3	3	1 320	2 700	260	2 000	800
395	410	418	505	–	–	3	3	1 700	3 550	340	2 000	700

Cylindrical roller bearings with cage

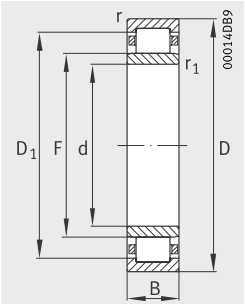
Single row
Non-locating bearings



Design 1
N



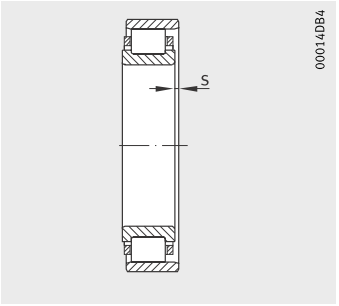
Design 2
N with lubrication groove and holes



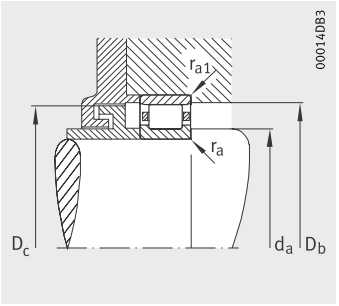
Design 3
NU, cylindrical or tapered bore

Dimension table (continued) · Dimensions in mm

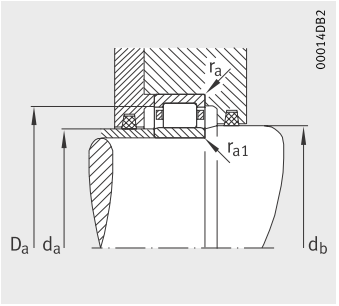
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	$s^{1)}$	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
N1076-M1	1	67,2	**380**	560	82	5	5	9	515	–	–	441,6	–	–
N1076-M1B	1	67,6	**380**	560	82	5	5	9	515	–	–	441,6	–	–
NU1076-M1	3	69,1	**380**	560	82	5	5	9	515	425	498,1	–	–	–
NU1076-M1-C3	3	69,1	**380**	560	82	5	5	9	515	425	498,1	–	–	–
NU1076-M1A	3	69,1	**380**	560	82	5	5	9	515	425	498,1	–	–	–
NU3076-M1	3	117	**380**	560	135	5	5	12,5	515	425	498,1	–	–	–
NU3176-M1	3	231	**380**	620	194	5	5	19,5	568	440	547	–	–	–
NU276-E-M1	3	162	**380**	680	95	6	6	8	622	494	601	–	–	–
NU1276-M1	3	211	**380**	680	132	6	6	9,5	619	449	592	–	–	–
NU2276-E-M1	3	288	**380**	680	175	6	6	13,8	615	451	588,8	–	–	–
NU2276-E-M1A	3	293	**380**	680	175	6	6	13,8	615	451	588,8	–	–	–
Z-527457.ZL	2	19,4	**400**	500	46	2,1	2,1	8	476	–	–	437,4	3,2	9,5
NU1880-M1	3	20,3	**400**	500	46	2,1	2,1	5,3	476	428	468	–	–	–
NU3880-M1	3	34	**400**	500	75	2,1	2,1	7,8	476	428	468	–	–	–
NU1980-M1	3	41,9	**400**	540	65	4	4	7,2	504	436	492,7	–	–	–
NU2980-M1	3	55,3	**400**	540	82	4	4	7,2	506	434	494	–	–	–
NU3980-E-M1	3	70,3	**400**	540	106	4	4	8,7	510	434	497,5	–	–	–
N1080-M1	1	87,9	**400**	600	90	5	5	9,5	550	–	–	469	–	–
NU1080-K-M1	3	88,5	**400**	600	90	5	–	9,5	550	450	531,5	–	–	–
NU1080-M1	3	90,1	**400**	600	90	5	5	9,5	550	450	531,5	–	–	–
NU1080-M1-C3	3	90,1	**400**	600	90	5	5	9,5	550	450	531,5	–	–	–
NU1080-M1A	3	90,6	**400**	600	90	5	5	9,5	550	450	531,5	–	–	–
NU3080-M1	3	153	**400**	600	148	5	5	12,8	550	450	531,5	–	–	–
NU3180-M1	3	260	**400**	650	200	6	6	18	600	460	577,5	–	–	–
NU1280-M1	3	258	**400**	720	140	6	6	9,8	654	474	625	–	–	–
NU2280-E-M1	3	342	**400**	720	185	6	6	15,4	661	471	630,5	–	–	–
NU2280-E-M1A	3	346	**400**	720	185	6	6	15,4	661	471	630,5	–	–	–
Z-547075.01.ZL	1	32,2	**406**	502	76	4	2,5	–	482,7	–	–	437,6	–	–
Z-547459.ZL	1	33,7	**406**	502	76	4	4	–	482,7	–	–	437,6	–	–
Z-527458.ZL	2	21	**420**	520	46	2,1	2,1	8,5	496	–	–	457,5	3,2	12,2
NU1884-M1	3	20,9	**420**	520	46	2,1	2,1	5,3	496	448	488	–	–	–
NU3884-M1	3	35,5	**420**	520	75	2,1	2,1	7,8	496	448	488	–	–	–
NU1984-M1	3	44,2	**420**	560	65	4	4	7,2	524	456	510,4	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

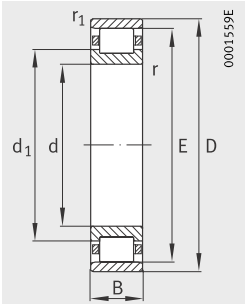


Mounting dimensions for NU

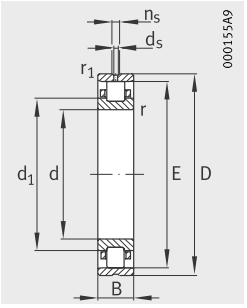
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
398	–	–	543	519	511	4	4	1 180	2 000	180	2 400	1 250
398	–	–	543	519	511	4	4	1 180	2 000	180	2 400	1 250
397	420	430	543	–	–	4	4	1 180	2 000	156	2 000	1 050
397	420	430	543	–	–	4	4	1 180	2 000	156	2 000	1 050
397	420	430	543	–	–	4	4	1 180	2 000	156	2 000	1 050
397	420	430	543	–	–	4	4	2 240	4 550	435	1 900	670
400	436	444	600	–	–	4	4	3 450	6 300	600	1 600	600
406	556	564	654	–	–	5	5	2 120	3 450	255	1 500	610
406	445	453	654	–	–	5	5	2 850	4 150	370	1 500	700
406	446	456	654	–	–	5	5	4 050	6 700	610	1 400	450
406	446	456	654	–	–	5	5	4 050	6 700	610	1 400	450
410	–	–	490	480	472	2,1	2,1	300	530	37	2 400	–
410	424	431	490	–	–	2,1	2,1	520	1 100	88	2 400	–
410	424	431	490	–	–	2	2	930	2 280	219	2 200	750
415	432	440	525	–	–	3	3	800	1 500	123	2 200	–
415	430	438	525	–	–	3	3	1 340	2 750	265	2 000	750
415	430	438	525	–	–	3	3	1 760	3 750	360	1 900	670
417	–	–	583	554	546	4	4	1 370	2 320	212	1 900	950
417	445	455	583	–	–	4	–	1 370	2 320	177	1 900	980
417	445	455	583	–	–	4	4	1 370	2 320	177	1 900	980
417	445	455	583	–	–	4	4	1 370	2 320	177	1 900	980
417	445	455	583	–	–	4	4	1 370	2 320	177	1 900	980
417	445	455	583	–	–	4	4	2 650	5 400	510	1 800	600
426	456	464	624	–	–	5	5	4 050	7 500	690	1 400	530
426	470	478	694	–	–	5	5	3 050	4 400	385	1 400	670
426	467	475	694	–	–	5	5	5 600	7 600	670	1 300	850
426	467	475	694	–	–	5	5	5 600	7 600	670	1 300	410
421	–	–	490	486	478	3	2,1	1 160	2 750	231	2 200	670
421	–	–	490	486	478	3	3	1 160	2 750	231	2 200	670
430	–	–	510	500	492	2,1	2,1	315	570	39,5	2 200	–
430	444	451	510	–	–	2	2	530	1 140	90	2 200	–
430	444	451	510	–	–	2	2	950	2 400	226	2 000	700
435	452	460	545	–	–	3	3	830	1 600	129	2 000	–

Cylindrical roller bearings with cage

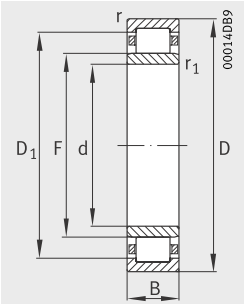
Single row
Non-locating bearings



Design 1
N



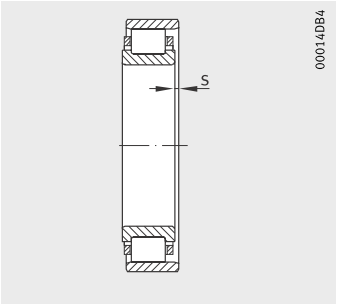
Design 2
N with lubrication groove and holes



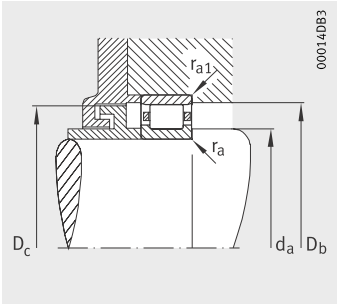
Design 3
NU, cylindrical or tapered bore

Dimension table (continued) · Dimensions in mm

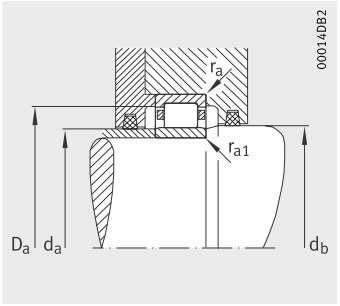
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[1)]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU2984-M1	3	58,6	**420**	560	82	4	4	6	526	454	511,6	–	–	–
NU3984-E-M1	3	73	**420**	560	106	4	4	5,7	530	454	517,5	–	–	–
N1084-M1	1	92,2	**420**	620	90	5	5	9,6	570	–	–	489	–	–
NU1084-M1	3	92,9	**420**	620	90	5	5	9,6	570	470	551,5	–	–	–
NU1084-M1A	3	94,2	**420**	620	90	5	5	9,6	570	470	551,5	–	–	–
NU3084-M1	3	162	**420**	620	150	5	5	13,5	570	470	551,5	–	–	–
NU3084-M1A	3	162	**420**	620	150	5	5	13,5	570	470	551,5	–	–	–
NU3184-M1	3	352	**420**	700	224	6	6	19	645	485	619,5	–	–	–
NU1284-M1	3	314	**420**	760	150	7,5	7,5	9,8	694	494	662	–	–	–
NU2284-E-M1	3	398	**420**	760	195	7,5	7,5	16,8	690	494	658	–	–	–
NU2284-E-M1A	3	406	**420**	760	195	7,5	7,5	16,8	690	494	658	–	–	–
Z-531636.ZL	2	19	**440**	540	40	2,1	2,1	6,5	514	–	–	478,6	3,2	9,5
Z-527459.ZL	2	22	**440**	540	46	2,1	2,1	8,5	516	–	–	477,4	3,2	12,2
N1888-M1B	1	22,3	**440**	540	46	2,1	2,1	5,3	516	–	–	476	–	–
NU1888-M1	3	22,2	**440**	540	46	2,1	2,1	5,3	516	468	508	–	–	–
NU3888-M1	3	37	**440**	540	75	2,1	2,1	7,8	516	468	508	–	–	–
NU1988-M1	3	60,5	**440**	600	74	4	4	8,9	558	482	545,5	–	–	–
N2988-M1B	1	81	**440**	600	95	4	4	8,7	560	–	–	493,3	–	–
NU2988-M1	3	81	**440**	600	95	4	4	8,7	560	480	545,6	–	–	–
NU3988-E-M1	3	99,2	**440**	600	118	4	4	9,7	564	480	550	–	–	–
N1088-M1	1	107	**440**	650	94	6	6	9,8	597	–	–	513,5	–	–
NU1088-M1	3	107	**440**	650	94	6	6	9,8	597	493	577,6	–	–	–
NU1088-M1A	3	109	**440**	650	94	6	6	9,8	597	493	577,6	–	–	–
NU1088-MPA	3	113	**440**	650	94	6	6	9,8	597	493	577,6	–	–	–
NU3088-K-M1A	3	181	**440**	650	157	6	–	3,2	597	493	577,6	–	–	–
NU3188-M1	3	367	**440**	720	226	6	6	19,1	665	505	640	–	–	–
NU1288-M	3	345	**440**	790	155	7,5	7,5	9,8	724	514	690	–	–	–
NU2288-E-M1	3	438	**440**	790	200	7,5	7,5	17,5	718	518	686	–	–	–
NU2288-E-M1A	3	449	**440**	790	200	7,5	7,5	17,5	718	518	686	–	–	–
Z-527460.ZL	2	32,1	**460**	580	56	3	3	10	550	–	–	505	3,2	12,2
NU1892-M1	3	34,1	**460**	580	56	3	3	6,6	550	494	540,5	–	–	–
NU3892-M1	3	56,4	**460**	580	90	3	3	10	550	494	540,5	–	–	–
NU1992-M1	3	63,1	**460**	620	74	4	4	8,4	578	502	562,8	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

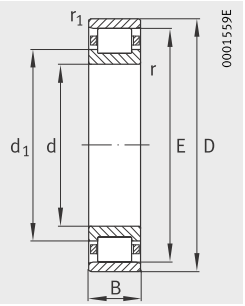


Mounting dimensions for NU

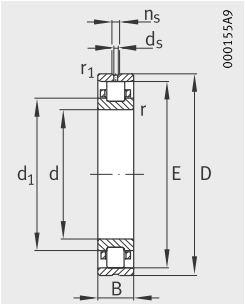
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
435	450	458	545	–	–	3	3	1 370	2 900	275	1 900	700
435	450	458	545	–	–	3	3	1 760	3 900	370	1 900	630
437	–	–	603	574	566	4	4	1 400	2 450	219	1 800	900
437	465	475	603	–	–	4	4	1 400	2 450	183	1 800	920
437	465	475	603	–	–	4	4	1 400	2 450	183	1 800	920
437	465	475	603	–	–	4	4	2 700	5 600	530	1 600	560
437	465	475	603	–	–	4	4	2 700	5 600	530	1 600	560
446	480	490	674	–	–	5	5	4 900	8 800	790	1 400	480
452	490	498	728	–	–	6	6	3 900	5 700	490	1 400	560
452	489	499	728	–	–	6	6	5 000	8 150	710	1 200	380
452	489	499	728	–	–	6	6	5 000	8 150	710	1 200	380
450	–	–	530	519	509	2,1	2,1	290	550	37	2 200	–
450	–	–	530	521	511	2,1	2,1	335	620	42	2 200	–
450	–	–	530	521	511	2	2	540	1 200	104	2 200	–
450	464	471	530	–	–	2	2	540	1 200	93	2 200	–
450	464	471	530	–	–	2	2	965	2 500	232	2 000	670
455	478	486	585	–	–	3	3	1 000	1 900	149	1 900	–
455	–	–	585	565	555	3	3	1 630	3 450	320	1 800	670
455	476	484	585	–	–	3	3	1 630	3 450	320	1 800	670
455	476	484	585	–	–	3	3	2 120	4 650	430	1 600	560
463	–	–	627	601	593	5	5	1 560	2 750	244	1 600	850
463	488	498	627	–	–	5	5	1 560	2 750	203	1 600	860
463	488	498	627	–	–	5	5	1 560	2 750	203	1 600	860
463	488	498	627	–	–	5	5	1 560	2 750	203	1 600	860
463	488	498	627	–	–	5	–	3 000	6 400	590	1 500	500
466	500	510	694	–	–	5	5	5 100	9 300	830	1 400	450
472	509	519	758	–	–	6	6	4 050	6 000	500	1 300	530
472	514	523	758	–	–	6	6	5 100	8 300	710	1 200	380
472	514	523	758	–	–	6	6	5 100	8 300	710	1 200	380
472	–	–	568	555	545	2,5	2,5	400	710	48	2 000	–
472	490	497	568	–	–	2,5	2,5	670	1 430	109	2 000	–
472	490	497	568	–	–	2,5	2,5	1 200	3 050	280	1 800	630
475	498	506	605	–	–	3	3	1 020	1 960	135	1 800	–

Cylindrical roller bearings with cage

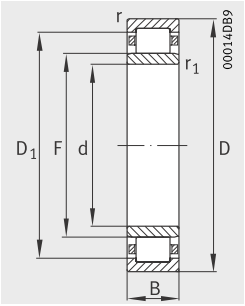
Single row
Non-locating bearings



Design 1
N



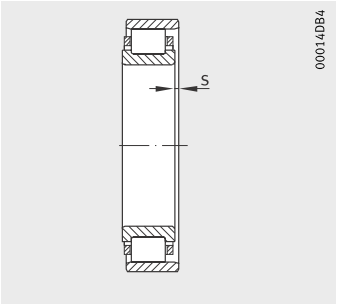
Design 2
N with lubrication groove and holes



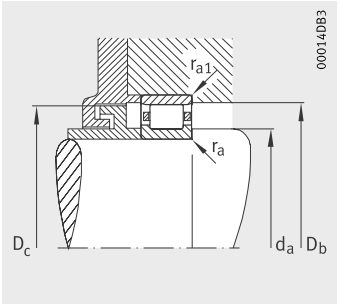
Design 3
NU, cylindrical or tapered bore

Dimension table (continued) · Dimensions in mm

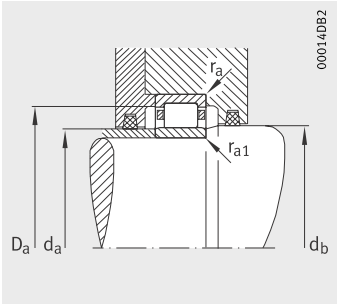
Designation	De-sign	Mass	Dimensions											
		m	d	D	B	r	r_1	s[1)]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU2992-M1	3	84	**460**	620	95	4	4	8,7	580	500	564	–	–	–
NU3992-E-M1	3	104	**460**	620	118	4	4	6,2	584	500	570	–	–	–
NU1092-K-M1	3	122	**460**	680	100	6	–	11,2	624	516	603,9	–	–	–
NU1092-K-M1A	3	124	**460**	680	100	6	–	11,2	624	516	603,9	–	–	–
NU1092-M1	3	125	**460**	680	100	6	6	11,2	624	516	603,9	–	–	–
NU1092-M1A	3	126	**460**	680	100	6	6	11,2	624	516	603,9	–	–	–
NU3092-K-M1A	3	206	**460**	680	163	6	–	14,4	624	516	603,9	–	–	–
NU3192-M1A	3	436	**460**	760	240	7,5	7,5	20	701	531	674	–	–	–
NU1292-M1	3	401	**460**	830	165	7,5	7,5	14,1	759	539	724	–	–	–
NU2292-E-M1	3	511	**460**	830	212	7,5	7,5	20	756	544	722	–	–	–
NU2292-E-M1A	3	521	**460**	830	212	7,5	7,5	20	756	544	722	–	–	–
NU2292-E-MPA	3	513	**460**	830	212	7,5	7,5	20	756	544	722	–	–	–
Z-527461.ZL	2	34,6	**480**	600	56	3	3	10	570	–	–	525	3,2	12,2
NU1896-M1	3	35,2	**480**	600	56	3	3	6,6	570	514	560,5	–	–	–
NU3896-M1	3	57,8	**480**	600	90	3	3	10	570	514	560,5	–	–	–
NU1996-M1	3	74,2	**480**	650	78	5	5	8,8	605	525	589	–	–	–
NU2996-M1	3	98,8	**480**	650	100	5	5	6,3	607	523	593	–	–	–
NU3996-E-M1	3	125	**480**	650	128	5	5	6,7	613	523	598	–	–	–
N1096-M1	1	128	**480**	700	100	6	6	10,7	644	–	–	556,4	–	–
NU1096-M1	3	129	**480**	700	100	6	6	10,7	644	536	623,9	–	–	–
NU1096-M1A	3	132	**480**	700	100	6	6	10,7	644	536	623,9	–	–	–
NU3096-M1	3	219	**480**	700	165	6	6	15	644	536	623,9	–	–	–
NU3196-M1	3	483	**480**	790	248	7,5	7,5	22	726	556	698,8	–	–	–
NU1296-M1	3	468	**480**	870	170	7,5	7,5	10,5	794	564	757	–	–	–
Z-537024.ZL	2	29,6	**500**	620	45	3	3	7	587	–	–	547	3,2	9,5
Z-527462.ZL	2	35	**500**	620	56	3	3	10	590	–	–	545	3,2	12,2
N18/500-M1	1	36,1	**500**	620	56	3	3	6,6	590	–	–	543,5	–	–
NU18/500-M1	3	36,9	**500**	620	56	3	3	6,6	590	534	580	–	–	–
N28/500-M1	1	48,2	**500**	620	72	3	3	8	590	–	–	543,5	–	–
NU28/500-M1	3	48,5	**500**	620	72	3	3	8	590	534	580	–	–	–
NU28/500-M1A	3	49,1	**500**	620	72	3	3	8	590	534	580	–	–	–
NU38/500-M1	3	60,5	**500**	620	90	3	3	10	590	534	580	–	–	–
NU19/500-M1	3	76,8	**500**	670	78	5	5	8,8	625	545	609	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

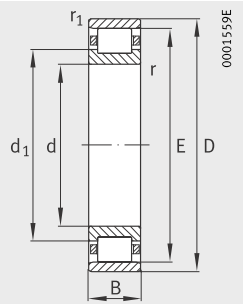


Mounting dimensions for NU

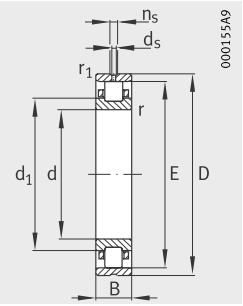
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
475	496	504	605	–	–	3	3	1 660	3 600	330	1 600	630
475	496	504	605	–	–	3	3	2 160	4 800	440	1 600	530
483	510	522	657	–	–	5	–	1 660	3 000	218	1 600	800
483	510	522	657	–	–	5	–	1 660	3 000	218	1 600	800
483	510	522	657	–	–	5	5	1 660	3 000	218	1 600	830
483	510	522	657	–	–	5	5	1 660	3 000	218	1 600	830
483	511	521	657	–	–	5	–	3 250	6 950	630	1 400	480
492	526	536	728	–	–	6	6	5 600	10 400	920	1 300	430
492	534	544	798	–	–	6	6	4 650	6 950	580	1 200	500
492	540	549	798	–	–	6	6	5 600	9 150	770	1 100	360
492	540	549	798	–	–	6	6	5 600	9 150	770	1 100	355
492	540	549	798	–	–	6	6	5 600	9 150	770	1 100	360
492	–	–	588	575	565	2,5	2,5	415	765	52	1 900	–
492	510	517	588	–	–	2,5	2,5	680	1 460	113	1 900	–
492	510	517	588	–	–	2,5	2,5	1 220	3 100	285	1 800	600
497	521	529	633	–	–	4	4	1 140	2 240	172	1 800	–
497	519	527	633	–	–	4	4	1 900	4 150	380	1 500	560
497	519	527	633	–	–	4	4	2 450	5 500	495	1 500	500
503	–	–	677	648,5	639,5	5	5	1 700	3 100	270	1 500	800
503	530	542	677	–	–	5	5	1 700	3 100	225	1 500	780
503	530	542	677	–	–	5	5	1 700	3 100	225	1 500	780
503	531	541	677	–	–	5	5	3 350	7 200	650	1 400	450
512	551	561	758	–	–	6	6	5 850	11 000	970	1 200	400
512	559	569	838	–	–	6	6	5 100	7 650	630	1 100	450
512	–	–	608	593	581	2,5	2,5	360	695	47	1 900	–
512	–	–	608	596	584	2,5	2,5	440	830	55	1 800	–
512	–	–	608	596	584	2,5	2,5	695	1 530	130	1 800	–
512	530	538	608	–	–	2,5	2,5	695	1 530	116	1 800	–
512	–	–	608	596	584	2,5	2,5	1 020	2 500	222	1 600	630
512	530	538	608	–	–	2,5	2,5	1 020	2 500	222	1 600	630
512	530	538	608	–	–	2,5	2,5	1 020	2 500	222	1 600	630
512	530	538	608	–	–	2,5	2,5	1 250	3 250	290	1 600	560
517	541	549	653	–	–	4	4	1 160	2 320	176	1 600	–

Cylindrical roller bearings with cage

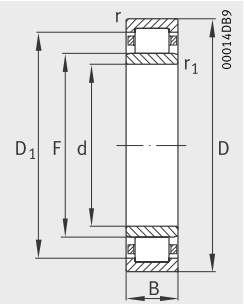
Single row
Non-locating bearings



Design 1
N



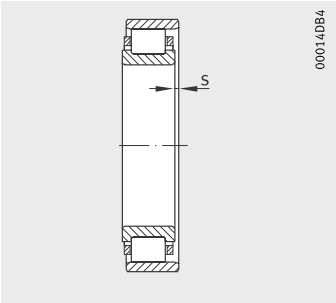
Design 2
N with lubrication groove and holes



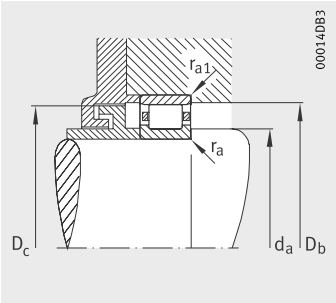
Design 3
NU, cylindrical or tapered bore

Dimension table (continued) · Dimensions in mm

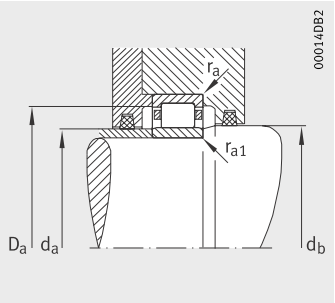
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[1)]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU29/500-M1	3	103	**500**	670	100	5	5	6,3	627	543	613	–	–	–
NU39/500-E-M1	3	128	**500**	670	128	5	5	11	633	543	618	–	–	–
N10/500-M1	1	132	**500**	720	100	6	6	10,7	664	–	–	576,4	–	–
NU10/500-M1	3	133	**500**	720	100	6	6	10,7	664	556	643,9	–	–	–
NU10/500-M1A	3	135	**500**	720	100	6	6	10,7	664	556	643,9	–	–	–
NU20/500-E-M1	3	177	**500**	720	128	6	6	7	673	553	655,5	–	–	–
NU30/500-M1	3	230	**500**	720	167	6	6	10,8	664	556	643,9	–	–	–
NU31/500-M1	3	575	**500**	830	264	7,5	7,5	23,5	761	581	732	–	–	–
NU12/500-M1	3	568	**500**	920	185	7,5	7,5	16	839	589	799	–	–	–
NU12/500-M1A	3	568	**500**	920	185	7,5	7,5	16	839	589	799	–	–	–
NU22/500-E-M1	3	728	**500**	920	243	7,5	7,5	17	824	604	789	–	–	–
Z-527247.ZL	2	31	**530**	650	45	3	3	3,2	620	–	–	575	3,2	9,5
Z-527272.ZL	2	36,6	**530**	650	56	3	3	10	620	–	–	573,5	3,2	12,2
NU18/530-M1	3	38,5	**530**	650	56	3	3	6,6	620	564	610,5	–	–	–
NU28/530-M1	3	50,7	**530**	650	72	3	3	8	620	564	610,5	–	–	–
NU38/530-M1	3	64,1	**530**	650	90	3	3	10	620	564	610,5	–	–	–
NU19/530-M1	3	89,9	**530**	710	82	5	5	9,3	662	578	645,2	–	–	–
NU29/530-M1	3	123	**530**	710	106	5	5	8,5	665	575	647	–	–	–
NU10/530-M1	3	190	**530**	780	112	6	6	10,2	719	591	696	–	–	–
NU10/530-M1A	3	193	**530**	780	112	6	6	10,2	719	591	696	–	–	–
NU20/530-E-M1	3	250	**530**	780	145	6	6	8	724	594	703,1	–	–	–
NU30/530-K-M1A	3	311	**530**	780	185	6	–	16,8	719	591	696	–	–	–
NU30/530-M1A	3	315	**530**	780	185	6	6	15,5	719	591	696	–	–	–
NU31/530-M1	3	665	**530**	870	272	7,5	7,5	22	801	611	770,6	–	–	–
NU12/530-M1	3	702	**530**	980	200	9,5	9,5	11,7	894	624	851	–	–	–
Z-540208.ZL	2	33	**560**	680	45	3	3	7	647	–	–	606,8	3,2	9,5
Z-526722.ZL	2	40,5	**560**	680	56	3	3	10	650	–	–	605	3,2	9,5
NU18/560-M1	3	40,5	**560**	680	56	3	3	6,6	650	594	640	–	–	–
NU38/560-M1	3	67,3	**560**	680	90	3	3	10	650	594	640	–	–	–
NU19/560-M1	3	105	**560**	750	85	5	5	9,6	700	610	682	–	–	–
NU29/560-M1	3	143	**560**	750	112	5	5	6,5	703	607	687,5	–	–	–
NU10/560-K-M1	3	209	**560**	820	115	6	–	9,8	754	626	731	–	–	–
NU10/560-M1	3	213	**560**	820	115	6	6	9,8	754	626	731	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

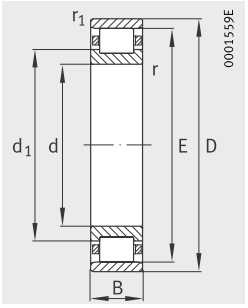


Mounting dimensions for NU

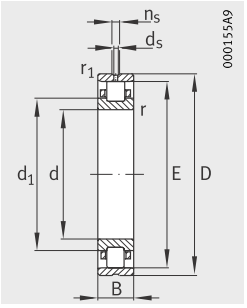
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
517	539	547	653	–	–	4	4	1 930	4 300	385	1 500	560
517	539	547	653	–	–	4	4	2 500	5 700	510	1 400	480
523	–	–	697	669	659	5	5	1 760	3 200	275	1 500	750
523	550	562	697	–	–	5	5	1 760	3 200	232	1 500	750
523	550	562	697	–	–	5	5	1 760	3 200	232	1 500	750
523	548	558	697	–	–	5	5	3 000	6 000	530	1 400	480
523	551	561	697	–	–	5	5	3 400	7 500	670	1 400	430
532	576	586	798	–	–	6	6	6 550	12 500	1 070	1 100	360
532	584	594	888	–	–	6	6	5 700	8 500	680	1 100	430
532	584	594	888	–	–	6	6	5 700	8 500	680	1 100	430
532	600	608	888	–	–	6	6	7 100	12 500	1 030	1 000	290
542	–	–	638	626	614	2,5	2,5	455	880	58	1 800	–
542	–	–	638	626	614	2,5	2,5	455	880	58	1 800	–
542	560	568	638	–	–	2,5	2,5	720	1 660	123	1 800	–
542	560	568	638	–	–	2,5	2,5	1 060	2 700	236	1 500	600
542	560	568	638	–	–	2,5	2,5	1 290	3 450	310	1 500	530
547	574	582	693	–	–	4	4	1 290	2 650	197	1 500	–
547	571	579	693	–	–	4	4	2 200	4 900	425	1 400	500
553	585	597	757	–	–	5	5	2 500	4 550	320	1 300	640
553	585	597	757	–	–	5	5	2 500	4 550	320	1 300	640
553	589	599	757	–	–	5	5	3 550	7 200	610	1 300	450
553	586	596	757	–	–	5	–	4 300	9 150	810	1 300	380
553	586	596	757	–	–	5	5	4 300	9 150	810	1 300	380
562	605	616	838	–	–	6	6	7 200	14 000	1 180	1 100	320
570	619	629	940	–	–	8	8	6 300	9 300	730	1 000	400
572	–	–	668	653	641	2,5	2,5	375	750	48,5	1 600	–
572	–	–	668	656	644	2,5	2,5	475	950	61	1 600	–
572	590	598	668	–	–	2,5	2,5	735	1 700	124	1 600	–
572	590	598	668	–	–	2,5	2,5	1 290	3 550	310	1 500	500
577	606	614	733	–	–	4	4	1 460	3 000	215	1 400	–
577	603	611	733	–	–	4	4	2 450	5 500	475	1 400	450
583	620	632	797	–	–	5	–	2 700	5 100	355	1 200	590
583	620	632	797	–	–	5	5	2 700	5 100	355	1 200	590

Cylindrical roller bearings with cage

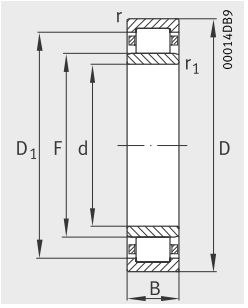
Single row
Non-locating bearings



Design 1
N



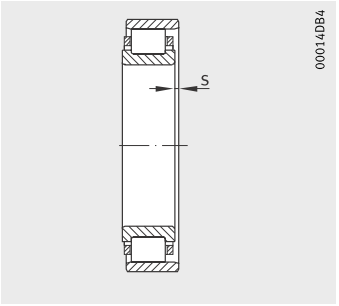
Design 2
N with lubrication groove and holes



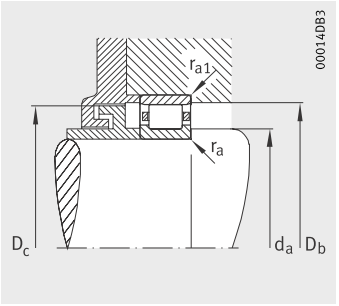
Design 3
NU

Dimension table (continued) · Dimensions in mm

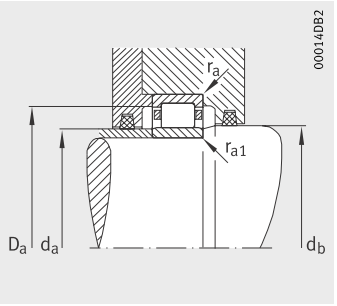
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[1)]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU10/560-M1A	3	222	**560**	820	115	6	6	9,8	754	626	731	–	–	–
NU20/560-E-M1	3	281	**560**	820	150	6	6	12	762	626	741	–	–	–
NU30/560-M1	3	362	**560**	820	195	6	6	16,8	754	626	731	–	–	–
NU31/560-M1	3	756	**560**	920	280	7,5	7,5	22,5	846	646	814	–	–	–
NU12/560-M1	3	778	**560**	1 030	206	9,5	9,5	11,9	939	659	894	–	–	–
NU12/560-M1A	3	778	**560**	1 030	206	9,5	9,5	11,9	939	659	894	–	–	–
NU22/560-E-M	3	1 040	**560**	1 030	272	9,5	9,5	21,9	939	659	894	–	–	–
NU22/560-E-M1A	3	1 070	**560**	1 030	272	9,5	9,5	21,9	939	659	894	–	–	–
Z-503867.ZL	3	64,6	**585**	750	60	3	3	–	693	637	682,4	–	–	–
Z-527273.ZL	2	52,3	**600**	730	60	3	3	12,2	697	–	–	658,4	3,2	12,2
N18/600-M1	1	50,4	**600**	730	60	3	3	7	697	–	–	647	–	–
NU18/600-M1	3	50,6	**600**	730	60	3	3	7	697	637	687	–	–	–
NU28/600-M1	3	67,4	**600**	730	78	3	3	9,5	697	637	687	–	–	–
NU38/600-M1	3	85,1	**600**	730	98	3	3	11	697	637	687	–	–	–
NU19/600-M1	3	125	**600**	800	90	5	5	9,9	748	652	730,7	–	–	–
NU29/600-E-M1	3	172	**600**	800	118	5	5	8,4	757	649	739	–	–	–
NU29/600-E-M1A	3	172	**600**	800	118	5	5	8,4	757	649	739	–	–	–
NU29/600-E-MP1A	3	169	**600**	800	118	5	5	8,4	757	649	739	–	–	–
N10/600-M1	1	240	**600**	870	118	6	6	10,6	803	–	–	693,5	–	–
N10/600-M1B	1	241	**600**	870	118	6	6	10,6	803	–	–	693,5	–	–
NU10/600-M1	3	241	**600**	870	118	6	6	10,6	803	667	776	–	–	–
NU10/600-M1A	3	243	**600**	870	118	6	6	10,6	803	667	776	–	–	–
NU30/600-MP1A	3	400	**600**	870	200	6	6	16	803	667	776	–	–	–
NU31/600-M1	3	898	**600**	980	300	7,5	7,5	25,5	902	692	868,5	–	–	–
NU12/600-M1	3	918	**600**	1 090	212	9,5	9,5	12	994	704	947,5	–	–	–
Z-547406.ZL	1	116	**622**	775	108	5	5	–	743,5	–	–	670,5	–	–
Z-537025.ZL	2	58,1	**630**	780	56	4	4	9	737	–	–	688,5	3,2	12,2
Z-527274.ZL	2	68,6	**630**	780	69	4	4	12,5	744	–	–	686	3,2	12,2
NU18/630-M1	3	71,8	**630**	780	69	4	4	8,4	744	672	732	–	–	–
N28/630-M1	1	94,5	**630**	780	88	4	4	8,7	744	–	–	684	–	–
NU28/630-M1	3	94,8	**630**	780	88	4	4	8,7	744	672	732	–	–	–
NU28/630-M1A	3	96,5	**630**	780	88	4	4	8,7	744	672	732	–	–	–
NU38/630-M1	3	118	**630**	780	112	4	4	11,2	744	672	732	–	–	–
NU19/630-M1	3	163	**630**	850	100	6	6	8,5	792	688	771	–	–	–
NU29/630-E-M1	3	211	**630**	850	128	6	6	10,3	803	683	784	–	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

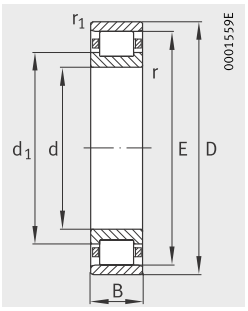


Mounting dimensions for NU

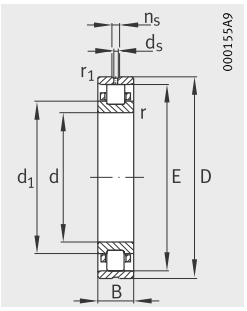
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
583	620	632	797	–	–	5	5	2 700	5 100	355	1 200	590
583	620,5	631,5	797	–	–	5	5	3 900	7 800	660	1 200	400
583	621	631	797	–	–	5	5	4 500	10 000	860	1 200	360
592	641	646	888	–	–	6	6	8 000	15 300	1 280	1 000	300
600	654	664	990	–	–	8	8	7 100	10 800	830	950	360
600	654	664	990	–	–	8	8	7 100	10 800	830	950	360
600	654	664	990	–	–	8	8	9 500	15 600	1 240	850	240
600	654	664	990	–	–	8	8	9 500	15 600	1 240	850	240
597	632	642	738	–	–	2,5	2,5	750	1 800	135	1 500	530
612	–	–	718	703	691	2,5	2,5	405	900	55	1 500	670
612	–	–	718	703	691	2,5	2,5	850	2 000	162	1 500	–
612	632	642	718	–	–	2,5	2,5	850	2 000	144	1 500	–
612	632	642	718	–	–	2,5	2,5	1 250	3 350	280	1 400	500
612	632	642	718	–	–	2,5	2,5	1 530	4 250	365	1 400	450
617	647	657	783	–	–	4	4	1 700	3 450	249	1 400	–
617	645	655	783	–	–	4	4	3 000	6 700	570	1 200	400
617	645	655	783	–	–	4	4	3 000	6 700	570	1 200	400
617	645	655	783	–	–	4	4	3 000	6 700	570	1 200	400
623	–	–	847	809	797	5	5	2 850	5 400	440	1 100	530
623	–	–	847	809	797	5	5	2 850	5 400	440	1 100	530
623	661	673	847	–	–	5	5	2 850	5 400	365	1 100	550
623	661	673	847	–	–	5	5	2 850	5 400	365	1 100	550
623	642	672	847	–	–	5	5	4 900	11 000	920	1 100	320
632	687	697	948	–	–	6	6	8 650	17 000	1 390	950	280
640	704	714	1 050	–	–	8	8	7 800	12 500	940	900	320
637	–	–	760	750	738	4	4	2 400	5 700	425	1 300	380
645	–	–	765	743	730	3	3	530	1 100	68	1 400	–
645	–	–	765	750	738	3	3	655	1 250	80	1 400	–
645	667	677	765	–	–	3	3	1 140	2 600	189	1 400	–
645	–	–	765	751	737	3	3	1 700	4 400	370	1 300	430
645	667	677	765	–	–	3	3	1 700	4 400	370	1 300	430
645	667	677	765	–	–	3	3	1 700	4 400	370	1 300	430
645	667	677	765	–	–	3	3	2 040	5 500	470	1 300	400
653	683	693	827	–	–	5	5	1 900	3 900	280	1 300	–
653	678	688	827	–	–	5	5	3 350	7 350	505	1 100	360

Cylindrical roller bearings with cage

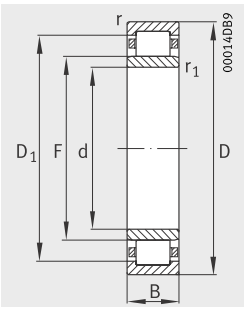
Single row
Non-locating bearings



Design 1
N



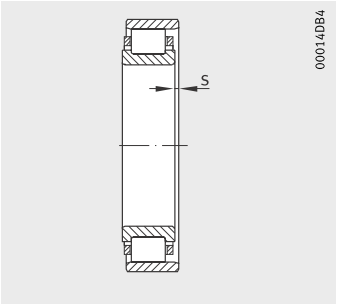
Design 2
N with lubrication groove and holes



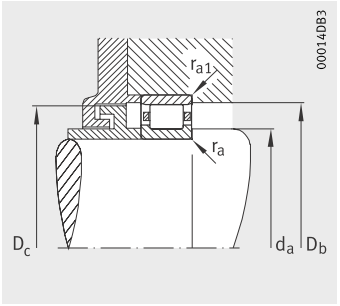
Design 3
NU

Dimension table (continued) · Dimensions in mm

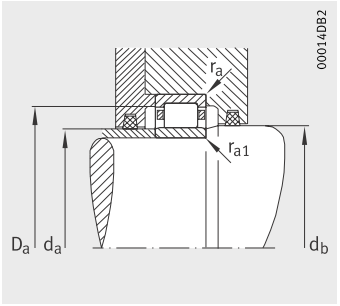
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[1)]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
N10/630-M1	1	292	**630**	920	128	7,5	7,5	11,7	850	–	–	728	–	–
NU30/630-M1	3	486	**630**	920	212	7,5	7,5	17,4	850	700	826,2	–	–	–
NU31/630-M	3	1 050	**630**	1 030	315	7,5	7,5	27,3	947	727	911,8	–	–	–
NU12/630-M1	3	1 100	**630**	1 150	230	15	15	20	1 020	760	978	–	–	–
Z-527249.ZL	2	60,1	**640**	790	56	4	4	8,5	750	–	–	698,3	3,2	12,2
Z-537238.ZL	2	60,7	**670**	820	56	4	4	9	778	–	–	729,5	6,3	12,2
Z-527463.ZL	2	70,3	**670**	820	69	4	4	12,5	784	–	–	725,9	3,2	12,2
NU18/670-M1	3	75,9	**670**	820	69	4	4	7,8	784	712	772	–	–	–
N28/670-M1	1	100	**670**	820	88	4	4	8,7	784	–	–	724	–	–
NU28/670-M1	3	100	**670**	820	88	4	4	8,7	784	712	772	–	–	–
NU28/670-M1A	3	101	**670**	820	88	4	4	8,7	784	712	772	–	–	–
NU38/670-M1	3	123	**670**	820	112	4	4	11,2	784	712	772	–	–	–
NU19/670-M1	3	186	**670**	900	103	6	6	11,3	839	731	817	–	–	–
NU29/670-M1	3	257	**670**	900	136	6	6	7,5	841	729	819	–	–	–
N10/670-M1	1	348	**670**	980	136	7,5	7,5	12,7	905	–	–	774,5	–	–
NU30/670-M1	3	620	**670**	980	230	7,5	7,5	20,6	905	745	876,2	–	–	–
NU12/670-M	3	1 300	**670**	1 220	243	12	12	13,4	1 115	785	1 062	–	–	–
Z-527275.ZL	2	86,8	**710**	870	74	4	4	12	833	–	–	768,4	3,2	12,2
N18/710-M1	1	91,5	**710**	870	74	4	4	7,9	833	–	–	766,5	–	–
NU18/710-M1	3	91,7	**710**	870	74	4	4	7,9	833	753	820	–	–	–
NU19/710-M1	3	213	**710**	950	106	6	6	9,3	886	774	867,7	–	–	–
NU29/710-M1	3	289	**710**	950	140	6	6	11,7	890	770	866	–	–	–
NU29/710-M1A	3	289	**710**	950	140	6	6	11,7	890	770	866	–	–	–
N10/710-M1	1	401	**710**	1 030	140	7,5	7,5	12,6	950	–	–	819,5	–	–
NU10/710-M1	3	400	**710**	1 030	140	7,5	7,5	12,6	950	790	924,5	–	–	–
NU10/710-M1A	3	406	**710**	1 030	140	7,5	7,5	12,6	950	790	924,5	–	–	–
NU30/710-M1	3	673	**710**	1 030	236	7,5	7,5	22,3	950	790	924,5	–	–	–
Z-527250.ZL	2	79	**720**	880	62	4	4	9	839	–	–	780,9	3,2	12,2
Z-536020.ZL	2	95	**750**	920	68	5	5	12	875	–	–	817	3,2	12,2
Z-526719.ZL	2	106	**750**	920	78	5	5	15	879	–	–	812,2	3,2	12,2
NU18/750-M1	3	108	**750**	920	78	5	5	8,8	879	799	866	–	–	–
NU38/750-M1	3	182	**750**	920	128	5	5	14	879	799	866	–	–	–
NU19/750-M1	3	245	**750**	1 000	112	6	6	12,1	935	815	911	–	–	–
NU29/750-M1	3	329	**750**	1 000	145	6	6	8	940	810	919	–	–	–
N10/750-M1	1	481	**750**	1 090	150	7,5	7,5	13,6	1 005	–	–	866	–	–



[1] Axial displacement “s” for N and NU



Mounting dimensions for N

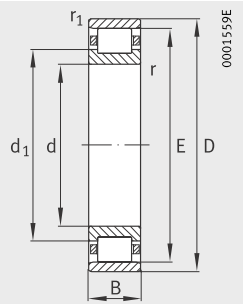


Mounting dimensions for NU

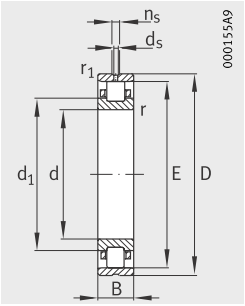
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
658	–	–	892	856	844	6	6	3 250	6 200	495	1 100	500
658	695	705	892	–	–	6	6	5 700	12 500	1 030	1 100	300
662	722	732	998	–	–	6	6	9 150	18 000	1 430	900	260
684	740	745	1 096	–	–	12	12	7 800	13 200	1 000	800	300
655	–	–	775	756	744	3	3	610	1 250	78	1 400	–
685	–	–	805	784	772	3	3	530	1 100	67	1 400	–
685	–	–	805	790	778	3	3	680	1 370	85	1 400	–
685	707	717	805	–	–	3	3	1 180	2 750	197	1 400	–
685	–	–	805	791	777	3	3	1 760	4 650	385	1 200	400
685	707	717	805	–	–	3	3	1 760	4 650	385	1 200	400
685	707	717	805	–	–	3	3	1 760	4 650	385	1 200	400
685	707	717	805	–	–	3	3	2 120	5 850	320	1 200	360
693	726	736	877	–	–	5	5	2 040	4 250	300	1 200	–
693	724	734	877	–	–	5	5	3 450	8 150	690	1 100	340
698	–	–	952	911	899	6	6	3 750	7 100	540	950	450
698	740	750	952	–	–	6	6	6 550	14 600	1 180	950	260
718	780	790	1 172	–	–	10	10	9 150	14 300	1 050	800	280
725	–	–	855	840	826	3	3	800	1 560	124	1 200	–
725	–	–	855	840	826	3	3	1 400	3 250	260	1 200	–
725	748	758	855	–	–	3	3	1 400	3 250	230	1 200	–
733	769	779	927	–	–	5	5	2 240	4 750	300	1 100	–
733	765	775	927	–	–	5	5	3 750	8 800	710	1 000	320
733	765	775	927	–	–	5	5	3 750	8 800	710	1 000	320
738	–	–	1 002	957	943	6	6	4 050	8 000	620	950	430
738	784	796	1 002	–	–	6	6	4 050	8 000	510	950	425
738	784	796	1 002	–	–	6	6	4 050	8 000	510	950	425
738	785	795	1 002	–	–	6	6	6 800	15 600	1 250	950	240
735	–	–	865	846	832	3	3	800	1 700	104	1 200	–
767	–	–	903	882	868	4	4	735	1 560	94	1 100	–
767	–	–	903	886	872	4	4	850	1 700	102	1 100	–
767	794	804	903	–	–	4	4	1 430	3 450	213	1 100	–
767	794	804	903	–	–	4	4	2 550	7 350	590	1 100	320
773	810	820	977	–	–	5	5	2 500	5 300	365	1 100	–
773	805	815	977	–	–	5	5	4 150	9 650	770	950	300
778	–	–	1 062	1 012	998	6	6	4 500	9 000	680	850	400

Cylindrical roller bearings with cage

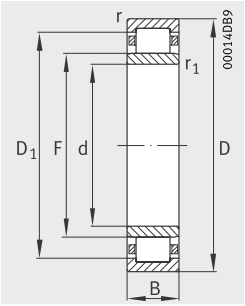
Single row
Non-locating bearings



Design 1
N



Design 2
N with lubrication groove and holes

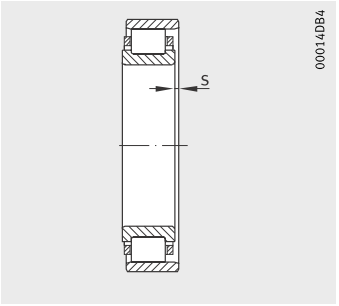


Design 3
NU

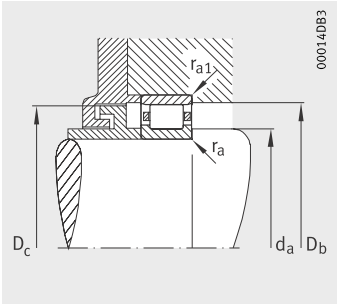
Dimension table (continued) · Dimensions in mm

Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	$s^{2)}$	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU10/750-M1	3	480	**750**	1 090	150	7,5	7,5	13,6	1 005	835	978	–	–	–
NU10/750-M1A	3	495	**750**	1 090	150	7,5	7,5	13,6	1 005	835	978	–	–	–
NU30/750-M1	3	808	**750**	1 090	250	7,5	7,5	20,5	1 005	835	978	–	–	–
Z-527276.ZL	$2^{1)}$	113	**800**	980	82	5	5	15	939	–	–	866,2	3,2	12,2
NU18/800-M1	3	129	**800**	980	82	5	5	8,9	939	849	923	–	–	–
NU38/800-M1	3	220	**800**	980	136	5	5	14	939	849	923	–	–	–
NU19/800-M1	3	276	**800**	1 060	115	6	6	12,8	990	870	968,4	–	–	–
NU29/800-M1	3	378	**800**	1 060	150	6	6	13,3	995	865	969	–	–	–
N10/800-M1	1	556	**800**	1 150	155	7,5	7,5	13,6	1 065	–	–	918	–	–
NU10/800-M1	3	557	**800**	1 150	155	7,5	7,5	13,6	1 065	885	1 036	–	–	–
NU10/800-M1A	3	557	**800**	1 150	155	7,5	7,5	13,6	1 065	885	1 036	–	–	–
NU30/800-M1	3	912	**800**	1 150	258	7,5	7,5	22,5	1 065	885	1 036	–	–	–
Z-527251.ZL	2	101	**820**	990	72	5	5	7,3	951	–	–	883,2	3,2	12,2
Z-526720.ZL	$2^{1)}$	130	**850**	1 030	82	5	5	15	989	–	–	916,2	3,2	15
NU18/850-M1	3	137	**850**	1 030	82	5	5	9	985	895	970	–	–	–
NU28/650-M1	3	185	**850**	1 030	106	5	5	9,3	985	895	970	–	–	–
NU28/650-M1A	3	186	**850**	1 030	106	5	5	9,3	985	895	970	–	–	–
NU38/850-M1	3	232	**850**	1 030	136	5	5	14	985	895	970	–	–	–
NU19/850-M1	3	315	**850**	1 120	118	6	6	12,6	1 049	921	1 024,1	–	–	–
NU29/850-M1	3	427	**850**	1 120	155	6	6	8,6	1 053	917	1 031,5	–	–	–
N10/850-M1	1	658	**850**	1 220	165	7,5	7,5	13,5	1 125	–	–	978	–	–
NU10/850-M1	3	659	**850**	1 220	165	7,5	7,5	13,5	1 125	945	1 096,2	–	–	–
NU30/850-M	3	1 080	**850**	1 220	272	7,5	7,5	26	1 125	945	1 096,2	–	–	–
Z-527464.ZL	$2^{1)}$	146	**900**	1 090	85	5	5	15	1 047	–	–	969,3	3,2	15
NU18/900-M1	3	159	**900**	1 090	85	5	5	11,8	1 047	951	1 031	–	–	–
NU38/900-M1	3	269	**900**	1 090	140	5	5	13,5	1 047	951	1 031	–	–	–
NU19/900-M1	3	354	**900**	1 180	122	6	6	9,8	1 108	972	1 086,2	–	–	–
NU29/900-M1	3	499	**900**	1 180	165	6	6	13,3	1 110	970	1 088	–	–	–
N10/900-M1	1	720	**900**	1 280	170	7,5	7,5	13,5	1 190	–	–	1 026	–	–
NU10/900-M1	3	728	**900**	1 280	170	7,5	7,5	13,5	1 190	990	1 158	–	–	–
NU30/900-M1	3	1 190	**900**	1 280	280	7,5	7,5	23	1 190	990	1 158	–	–	–

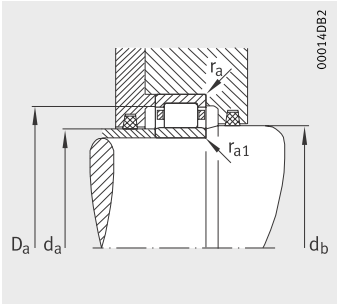
1) With thread M8 for eye bolts on the end faces.



[2] Axial displacement “s” for N and NU



Mounting dimensions for N

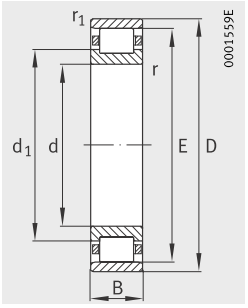


Mounting dimensions for NU

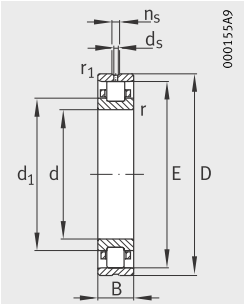
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
778	829	841	1 062	–	–	6	6	4 500	9 000	570	850	400
778	829	841	1 062	–	–	6	6	4 500	9 000	570	850	400
778	830	840	1 062	–	–	6	6	7 650	17 600	1 380	850	220
817	–	–	963	946	932	4	4	1 020	2 000	118	1 100	450
817	844	854	963	–	–	4	4	1 760	4 150	280	1 100	–
817	844	854	963	–	–	4	4	3 100	8 800	690	1 000	280
823	865	875	1 037	–	–	5	5	2 600	5 700	390	1 000	–
823	860	870	1 037	–	–	5	5	4 250	10 000	780	900	280
828	–	–	1 122	1 072	1 058	6	6	5 000	10 000	750	800	360
828	879	891	1 122	–	–	6	6	5 000	10 000	630	800	365
828	879	891	1 122	–	–	6	6	5 000	10 000	630	800	365
828	880	890	1 122	–	–	6	6	8 500	19 600	1 530	800	200
837	–	–	973	858	844	4	4	915	1 900	111	1 100	–
867	–	–	1 013	896	882	4	4	1 060	2 160	126	1 000	–
867	894	904	1 013	–	–	4	4	1 800	4 400	295	1 000	–
867	890	900	1 013	–	–	4	4	2 750	7 650	590	950	280
867	890	900	1 013	–	–	4	4	2 750	7 650	590	950	280
867	894	904	1 013	–	–	4	4	3 200	9 300	720	950	260
873	916	926	1 097	–	–	5	5	2 900	6 400	430	950	–
873	912	922	1 097	–	–	5	5	4 750	11 600	890	850	260
878	–	–	1 192	1 132	1 118	6	6	5 600	11 800	880	750	320
878	938	952	1 192	–	–	6	6	5 600	11 800	730	750	325
878	940	950	1 192	–	–	6	6	8 500	20 400	1 540	750	190
917	–	–	1 073	1 054	1 040	4	4	1 140	2 320	132	950	–
917	946	956	1 073	–	–	4	4	2 040	5 100	330	950	–
917	946	956	1 073	–	–	4	4	3 600	10 600	810	850	220
923	967	977	1 157	–	–	5	5	3 250	7 350	470	900	–
923	965	975	1 157	–	–	5	5	5 400	13 400	1 010	800	220
928	–	–	1 252	1 198	1 182	6	6	6 400	13 400	960	700	300
928	983	997	1 252	–	–	6	6	6 400	13 400	800	700	295
928	985	995	1 252	–	–	6	6	10 200	24 000	1 770	700	170

Cylindrical roller bearings with cage

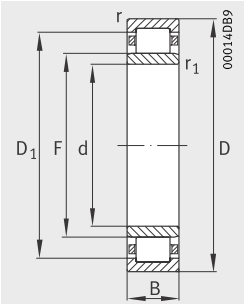
Single row
Non-locating bearings



Design 1
N



Design 2
N with lubrication groove and holes

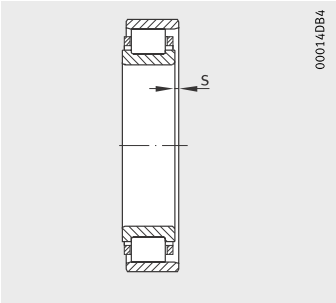


Design 3
NU

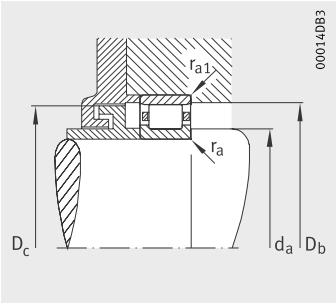
Dimension table (continued) · Dimensions in mm

Designation	De-sign	Mass	Dimensions											
		m	d	D	B	r	r_1	s[2]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
F-803618.ZL	2[1]	185	**950**	1 150	90	5	5	20,5	1 094	–	–	1 029,4	3,2	15
Z-527465.ZL	2[1]	171	**950**	1 150	90	5	5	15,5	1 104	–	–	1 024	3,2	15
NU18/950-M1	3	187	**950**	1 150	90	5	5	9,5	1 104	1 004	1 088	–	–	–
NU38/950-M1	3	318	**950**	1 150	150	5	5	15	1 104	1 004	1 088	–	–	–
NU19/950-M1	3	435	**950**	1 250	132	7,5	7,5	13,9	1 175	1 025	1 151	–	–	–
NU29/950-M1	3	596	**950**	1 250	175	7,5	7,5	14,5	1 175	1 025	1 151	–	–	–
N10/950-M1	1	898	**950**	1 360	180	7,5	7,5	13,5	1 255	–	–	1 091	–	–
NU10/950-M1	3	899	**950**	1 360	180	7,5	7,5	13,5	1 255	1 055	1 223	–	–	–
NU30/950-M	3	1 490	**950**	1 360	300	7,5	7,5	28	1 255	1 055	1 223	–	–	–
NU31/950-M	3	3 080	**950**	1 500	438	12	12	–	1 361	1 089	1 317	–	–	–
Z-527466.ZL	2[1]	198	**1 000**	1 210	92	6	6	16	1 155	–	–	1 075	4,8	15
NU18/1000-M1	3	242	**1 000**	1 220	100	6	6	10,3	1 170	1 058	1 150	–	–	–
NU28/1000-M	3	324	**1 000**	1 220	128	6	6	11	1 170	1 058	1 150	–	–	–
NU28/1000-MA	3	326	**1 000**	1 220	128	6	6	11	1 170	1 058	1 150	–	–	–
NU38/1000-M	3	411	**1 000**	1 220	165	6	6	16,3	1 170	1 058	1 150	–	–	–
Z-507276.ZL	3	423	**1 000**	1 290	130	7,5	7,5	11,3	1 215	1 075	1 187	–	–	–
NU19/1000-M1	3	527	**1 000**	1 320	140	7,5	7,5	10,5	1 240	1 080	1 214,4	–	–	–
NU29/1000-M1	3	708	**1 000**	1 320	185	7,5	7,5	16,3	1 240	1 080	1 215	–	–	–
N10/1000-M1	1	1 010	**1 000**	1 420	185	7,5	7,5	14,5	1 315	–	–	1 143	–	–
NU10/1000-M1	3	1 010	**1 000**	1 420	185	7,5	7,5	14,5	1 315	1 105	1 281	–	–	–
NU20/1000-E-M1	3	1 300	**1 000**	1 420	243	7,5	7,5	11,5	1 330	1 100	1 293	–	–	–
NU30/1000-M1	3	1 640	**1 000**	1 420	308	7,5	7,5	28	1 315	1 105	1 281	–	–	–
Z-539392.ZL	2	203	**1 030**	1 240	92	6	6	15	1 185	–	–	1 104	4,8	15
Z-539393.ZL	2	257	**1 030**	1 250	100	6	6	–	1 190	–	–	1 109	–	–
Z-526747.ZL	2[1]	211	**1 060**	1 270	92	6	6	16	1 215	–	–	1 134	4,8	9,5
Z-535549.ZL	2	240	**1 060**	1 280	100	6	6	12,5	1 220	–	–	1 139	4,8	9,5
NU18/1060-M1	3	259	**1 060**	1 280	100	6	6	10,3	1 230	1 118	1 210	–	–	–
NU28/1060-M	3	341	**1 060**	1 280	128	6	6	11	1 230	1 118	1 210	–	–	–
NU38/1060-M	3	431	**1 060**	1 280	165	6	6	16,3	1 230	1 118	1 210	–	–	–
NU19/1060-M1	3	630	**1 060**	1 400	150	7,5	7,5	11,5	1 312	1 148	1 285,8	–	–	–
NU29/1060-M1	3	830	**1 060**	1 400	195	7,5	7,5	16,2	1 315	1 145	1 288	–	–	–
N10/1060-M1	1	1 150	**1 060**	1 500	195	9,5	9,5	14,5	1 390	–	–	1 210	–	–
NU10/1060-M1	3	1 150	**1 060**	1 500	195	9,5	9,5	14,5	1 390	1 170	1 355	–	–	–

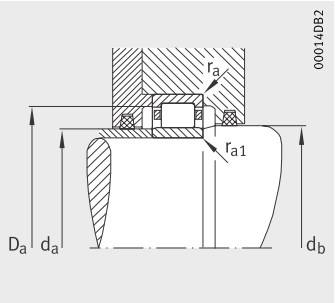
[1] With thread M8 for eye bolts on the end faces.



[2] Axial displacement “s” for N and NU



Mounting dimensions for N

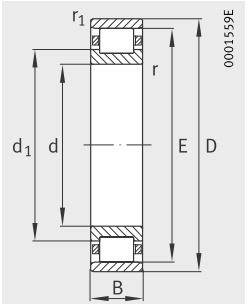


Mounting dimensions for NU

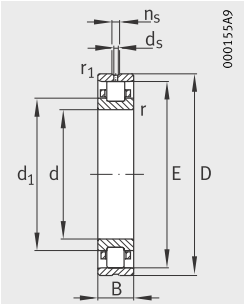
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
967	–	–	1 133	1 102	1 086	4	4	880	1 960	118	900	–
967	–	–	1 133	1 112	1 096	4	4	1 200	2 450	141	900	–
967	999	1 009	1 133	–	–	4	4	2 200	5 500	340	900	–
967	999	1 009	1 133	–	–	4	4	3 900	11 600	880	800	220
978	1 020	1 030	1 222	–	–	6	6	3 800	8 500	540	800	–
978	1 020	1 030	1 222	–	–	6	6	5 850	14 600	1 090	750	220
978	–	–	1 332	1 263	1 247	6	6	7 200	15 600	1 110	700	260
978	1 048	1 062	1 332	–	–	6	6	7 200	15 600	920	700	265
978	1 050	1 060	1 332	–	–	6	6	11 400	28 000	2 070	700	150
992	1 083	1 095	1 458	–	–	10	10	16 300	36 500	2 500	430	–
1 023	–	–	1 187	1 163	1 147	5	5	1 250	2 650	151	850	–
1 023	1 053	1 063	1 197	–	–	5	5	2 450	5 850	390	850	–
1 023	1 053	1 063	1 197	–	–	5	5	3 650	10 000	760	750	220
1 023	1 053	1 063	1 197	–	–	5	5	3 650	10 000	760	750	220
1 023	1 053	1 063	1 197	–	–	5	5	4 400	12 700	960	750	200
1 028	1 070	1 080	1 262	–	–	6	6	3 550	8 150	520	800	–
1 028	1 075	1 085	1 292	–	–	6	6	4 400	9 800	600	750	–
1 028	1 075	1 085	1 292	–	–	6	6	6 550	16 300	1 170	700	200
1 028	–	–	1 392	1 323	1 307	6	6	7 500	16 300	1 150	630	260
1 028	1 098	1 112	1 392	–	–	6	6	7 500	16 300	960	630	255
1 028	1 095	1 105	1 392	–	–	6	6	10 600	23 600	1 700	630	170
1 028	1 100	1 110	1 392	–	–	6	6	12 500	31 000	2 250	630	140
1 053	–	–	1 217	1 193	1 177	5	5	1 250	2 650	149	850	–
1 053	–	–	1 227	1 198	1 182	5	5	2 080	5 300	380	850	260
1 083	–	–	1 247	1 223	1 207	5	5	1 320	2 850	159	800	–
1 083	–	–	1 257	1 228	1 212	5	5	1 320	2 850	159	800	–
1 083	1 113	1 123	1 257	–	–	5	5	2 550	6 400	415	800	–
1 083	1 113	1 123	1 257	–	–	5	5	3 800	10 600	790	700	220
1 083	1 113	1 123	1 257	–	–	5	5	4 550	13 400	1 000	700	190
1 088	1 143	1 153	1 372	–	–	6	6	4 650	10 600	650	700	–
1 088	1 140	1 150	1 372	–	–	6	6	7 350	18 600	1 330	700	180
1 094	–	–	1 466	1 398	1 382	8	8	8 500	18 600	1 300	600	220
1 094	1 163	1 177	1 466	–	–	8	8	8 500	18 600	1 080	600	231

Cylindrical roller bearings with cage

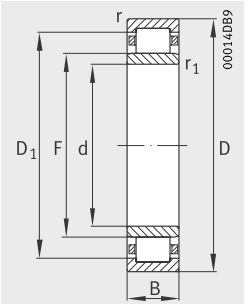
Single row
Non-locating bearings



Design 1
N



Design 2
N with lubrication groove and holes



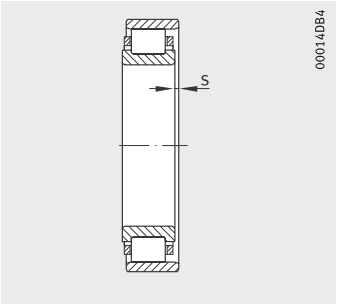
Design 3
NU

Dimension table (continued) · Dimensions in mm

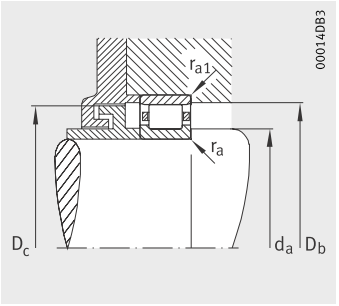
Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[3]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU20/1060-E-M1	3	1 480	**1 060**	1 500	250	9,5	9,5	11,5	1 405	1 165	1 367	–	–	–
NU30/1060-M1	3	1 920	**1 060**	1 500	325	9,5	9,5	29,8	1 390	1 170	1 355	–	–	–
F-808288.ZL	3	118	**1 110**	1 240	85	6	2	5	1 205	1 145	1 195	–	–	–
Z-527467.ZL	2[1]	239	**1 120**	1 340	94	6	6	17	1 280	–	–	1 199	4,8	9,5
Z-535550.ZL	2	284	**1 120**	1 360	104	6	6	20	1 290	–	–	1 209	4,8	9,5
NU18/1120-M1	3	312	**1 120**	1 360	106	6	6	11	1 305	1 185	1 286	–	–	–
NU38/1120-M	3	547	**1 120**	1 360	180	6	6	18	1 305	1 185	1 286	–	–	–
NU19/1120-M1	3	665	**1 120**	1 460	150	7,5	7,5	11,5	1 372	1 208	1 346	–	–	–
NU29/1120-M1	3	887	**1 120**	1 460	195	7,5	7,5	13,8	1 375	1 205	1 347,8	–	–	–
N10/1120-M1	1	1 300	**1 120**	1 580	200	9,5	9,5	16	1 465	–	–	1 276	–	–
NU10/1120-M1	3	1 300	**1 120**	1 580	200	9,5	9,5	16	1 465	1 235	1 428	–	–	–
NU20/1120-E-M1	3	1 710	**1 120**	1 580	265	9,5	9,5	13	1 480	1 230	1 440	–	–	–
NU30/1120-M1	3	2 260	**1 120**	1 580	345	9,5	9,5	32,3	1 465	1 235	1 428	–	–	–
Z-527468.ZL	2[1]	245	**1 180**	1 400	94	6	6	17	1 342	–	–	1 257,8	4,8	9,5
NU18/1180-M1	3	329	**1 180**	1 420	106	6	6	11	1 365	1 245	1 346	–	–	–
NU38/1180-M	3	569	**1 180**	1 420	180	6	6	18	1 365	1 245	1 346	–	–	–
NU19/1180-M1	3	789	**1 180**	1 540	160	7,5	7,5	12,5	1 445	1 275	1 418	–	–	–
NU29/1180-M1	3	1 060	**1 180**	1 540	206	7,5	7,5	16,5	1 450	1 270	1 421	–	–	–
NU39/1180-E-M1	3	1 350	**1 180**	1 540	272	7,5	7,5	13,9	1 460	1 270	1 432	–	–	–
N10/1180-M1	1	1 520	**1 180**	1 660	212	9,5	9,5	17	1 540	–	–	1 343	–	–
NU10/1180-M1	3	1 520	**1 180**	1 660	212	9,5	9,5	17	1 540	1 300	1 502	–	–	–
NU20/1180-E-M1	3	1 940	**1 180**	1 660	272	9,5	9,5	13	1 555	1 295	1 513	–	–	–
NU30/1180-M	3	2 520	**1 180**	1 660	355	9,5	9,5	32,3	1 540	1 300	1 502	–	–	–
Z-527469.ZL	2[2]	278	**1 250**	1 480	95	6	6	17	1 417	–	–	1 333	4,8	15
Z-566705.ZL	2	337	**1 250**	1 500	106	6	6	15	1 444	–	–	1 340	4,8	15
NU18/1250-M1	3	390	**1 250**	1 500	112	6	6	11,4	1 444	1 316	1 423,3	–	–	–
NU38/1250-M	3	654	**1 250**	1 500	185	6	6	17,3	1 444	1 316	1 423,3	–	–	–
NU19/1250-M1	3	938	**1 250**	1 630	170	7,5	7,5	13	1 530	1 350	1 501,2	–	–	–
NU29/1250-M1	3	1 260	**1 250**	1 630	218	7,5	7,5	10,3	1 535	1 345	1 505	–	–	–
NU39/1250-E-M1	3	1 570	**1 250**	1 630	280	7,5	7,5	13,6	1 545	1 345	1 516	–	–	–
N10/1250-M1	1	1 710	**1 250**	1 750	218	9,5	9,5	18,5	1 625	–	–	1 419	–	–
NU10/1250-M1	3	1 710	**1 250**	1 750	218	9,5	9,5	18,5	1 625	1 375	1 585	–	–	–

1) With thread M8 for eye bolts on the end faces.

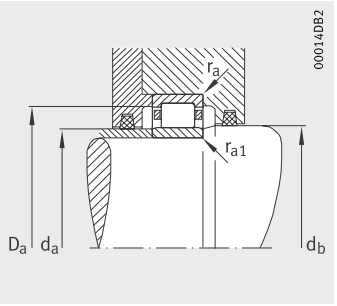
2) With thread M10 for eye bolts on the end faces.



[3] Axial displacement “s” for N and NU



Mounting dimensions for N

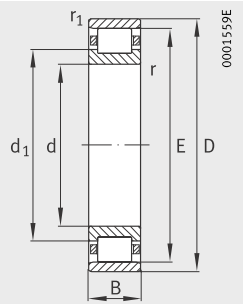


Mounting dimensions for NU

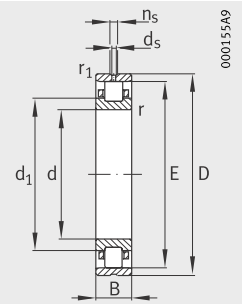
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
1 094	1 160	1 170	1 466	–	–	8	8	11 600	26 500	1 830	600	150
1 094	1 165	1 175	1 466	–	–	8	8	13 200	32 500	2 280	430	–
1 119	1 140	1 150	1 217	–	–	5	2	1 120	3 450	241	850	–
1 143	–	–	1 317	1 288	1 272	5	5	1 370	3 050	168	750	–
1 143	–	–	1 337	1 298	1 282	5	5	1 370	3 050	167	750	–
1 143	1 180	1 190	1 337	–	–	5	5	2 850	7 100	450	750	–
1 143	1 180	1 190	1 337	–	–	5	5	5 100	15 000	1 090	700	180
1 148	1 203	1 213	1 432	–	–	6	6	4 750	11 200	680	700	–
1 148	1 200	1 210	1 432	–	–	6	6	7 500	19 600	1 380	630	170
1 154	–	–	1 546	1 474	1 456	8	8	9 000	20 000	1 380	560	220
1 154	1 228	1 242	1 546	–	–	8	8	9 000	20 000	1 150	560	215
1 154	1 225	1 235	1 546	–	–	8	8	12 000	27 500	1 870	560	150
1 154	1 230	1 240	1 546	–	–	8	8	14 600	37 500	2 550	400	–
1 203	–	–	1 377	1 351	1 333	5	5	1 460	3 350	180	750	–
1 203	1 240	1 250	1 397	–	–	5	5	3 000	7 800	485	700	–
1 203	1 240	1 250	1 397	–	–	5	5	5 400	16 300	1 180	630	160
1 208	1 270	1 280	1 512	–	–	6	6	5 100	12 000	720	700	–
1 208	1 265	1 275	1 512	–	–	6	6	8 500	22 000	1 550	600	150
1 208	1 265	1 275	1 512	–	–	6	6	10 600	28 500	1 790	600	130
1 214	–	–	1 626	1 549	1 531	8	8	10 000	22 800	1 500	560	200
1 214	1 293	1 307	1 626	–	–	8	8	10 000	22 800	1 260	560	199
1 214	1 290	1 300	1 626	–	–	8	8	13 400	31 000	2 100	530	130
1 214	1 295	1 305	1 626	–	–	8	8	14 600	36 500	2 420	380	–
1 273	–	–	1 457	1 426	1 408	5	5	1 500	3 550	189	700	–
1 273	–	–	1 477	1 453	1 435	5	5	2 120	4 650	255	700	–
1 273	1 311	1 321	1 477	–	–	5	5	3 350	8 650	530	700	–
1 273	1 311	1 321	1 477	–	–	5	5	6 100	18 600	1 320	600	140
1 278	1 345	1 355	1 602	–	–	6	6	5 700	13 700	820	630	–
1 278	1 340	1 350	1 602	–	–	6	6	9 650	25 500	1 760	560	140
1 278	1 340	1 350	1 602	–	–	6	6	11 800	32 500	2 220	560	110
1 284	–	–	1 716	1 634	1 616	8	8	10 600	24 500	1 590	530	180
1 284	1 368	1 382	1 716	–	–	8	8	10 600	24 500	1 340	530	186

Cylindrical roller bearings with cage

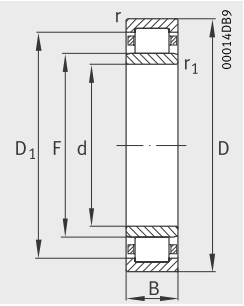
Single row
Non-locating bearings



Design 1
N



Design 2
N with lubrication groove and holes

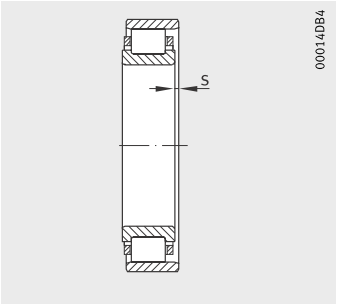


Design 3
NU

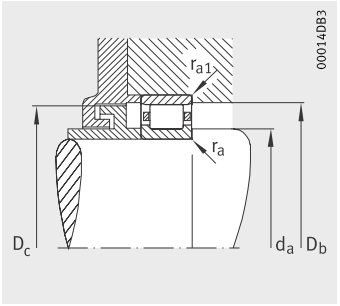
Dimension table (continued) · Dimensions in mm

Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[2]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
NU20/1250-E-M1	3	2 270	**1 250**	1 750	290	9,5	9,5	13,5	1 635	1 375	1 593	–	–	–
NU30/1250-M	3	2 940	**1 250**	1 750	375	9,5	9,5	35,3	1 625	1 375	1 585	–	–	–
Z-529599.ZL	2[1]	301	**1 320**	1 550	95	6	6	17	1 487	–	–	1 403	4,8	15
Z-526748.ZL	2	478	**1 320**	1 600	122	6	6	10	1 533	–	–	1 422	9,5	17,7
NU18/1320-M1	3	497	**1 320**	1 600	122	6	6	12,8	1 533	1 397	1 511	–	–	–
NU38/1320-M	3	854	**1 320**	1 600	206	6	6	20,5	1 533	1 397	1 511	–	–	–
NU19/1320-M1	3	1 080	**1 320**	1 720	175	7,5	7,5	13	1 615	1 425	1 584,6	–	–	–
NU29/1320-M1	3	1 470	**1 320**	1 720	230	7,5	7,5	17,6	1 620	1 420	1 588	–	–	–
NU39/1320-E-M1	3	1 850	**1 320**	1 720	300	7,5	7,5	14,9	1 630	1 420	1 600	–	–	–
N10/1320-M1	1	2 040	**1 320**	1 850	230	12	12	19	1 715	–	–	1 501	–	–
NU10/1320-M1	3	2 030	**1 320**	1 850	230	12	12	19	1 715	1 455	1 673	–	–	–
NU20/1320-E-M1	3	2 650	**1 320**	1 850	300	12	12	14	1 725	1 455	1 682	–	–	–
NU30/1320-M	3	3 520	**1 320**	1 850	400	12	12	39	1 715	1 455	1 673	–	–	–
Z-527470.ZL	2[1]	362	**1 400**	1 650	100	7,5	7,5	18	1 577	–	–	1 493	4,8	15
NU18/1400-M1	3	625	**1 400**	1 700	132	7,5	7,5	13,4	1 630	1 480	1 606	–	–	–
NU38/1400-M	3	1 050	**1 400**	1 700	224	7,5	7,5	21,5	1 630	1 480	1 606	–	–	–
NU19/1400-M1	3	1 270	**1 400**	1 820	185	9,5	9,5	14	1 710	1 510	1 678	–	–	–
NU29/1400-M	3	1 710	**1 400**	1 820	243	9,5	9,5	18,8	1 715	1 505	1 681	–	–	–
NU39/1400-E-M1	3	2 170	**1 400**	1 820	315	9,5	9,5	15,5	1 726	1 506	1 694	–	–	–
N10/1400-M1	1	2 350	**1 400**	1 950	243	12	12	19,5	1 810	–	–	1 587	–	–
NU10/1400-M1	3	2 350	**1 400**	1 950	243	12	12	19,5	1 810	1 540	1 767	–	–	–
NU20/1400-E-M1	3	3 010	**1 400**	1 950	315	12	12	26,4	1 820	1 540	1 775	–	–	–
NU30/1400-M	3	3 970	**1 400**	1 950	412	12	12	39,5	1 810	1 540	1 767	–	–	–
Z-529600.ZL	2[1]	433	**1 500**	1 760	105	7,5	7,5	20	1 682	–	–	1 598	8	15
NU18/1500-M1	3	750	**1 500**	1 820	140	7,5	7,5	14,5	1 745	1 585	1 719	–	–	–
NU38/1500-M	3	1 300	**1 500**	1 820	243	7,5	7,5	23,8	1 745	1 585	1 719	–	–	–
NU29/1500-M	3	2 110	**1 500**	1 950	258	9,5	9,5	12	1 835	1 615	1 800	–	–	–
NU39/1500-E-M	3	2 640	**1 500**	1 950	335	9,5	9,5	15,5	1 851	1 611	1 817	–	–	–

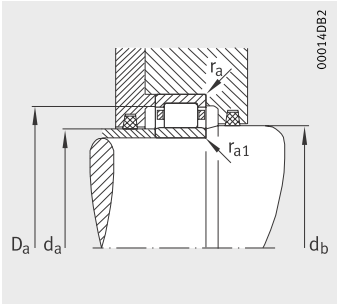
1) With thread M10 for eye bolts on the end faces.



[2] Axial displacement “s” for N and NU



Mounting dimensions for N

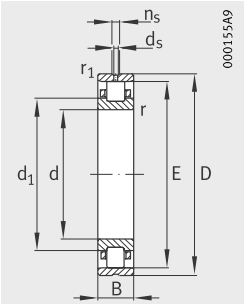


Mounting dimensions for NU

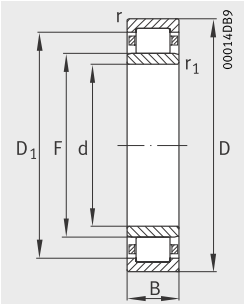
Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
1 284	1 370	1 380	1 716	–	–	8	8	13 700	32 500	2 190	530	130
1 284	1 370	1 380	1 716	–	–	8	8	16 300	41 500	2 700	360	–
1 243	–	–	1 527	1 496	1 478	5	5	1 560	3 750	197	700	–
1 243	–	–	1 577	1 542	1 524	5	5	2 600	6 000	315	630	–
1 243	1 392	1 402	1 577	–	–	5	5	3 800	10 200	600	630	–
1 243	1 392	1 402	1 577	–	–	5	5	6 800	21 200	1 450	560	130
1 348	1 420	1 430	1 692	–	–	6	6	6 400	15 600	910	600	–
1 348	1 415	1 425	1 692	–	–	6	6	10 600	29 000	1 930	530	120
1 348	1 415	1 425	1 692	–	–	6	6	12 900	36 000	2 420	530	110
1 362	–	–	1 808	1 724	1 706	10	10	11 800	27 000	1 750	500	170
1 362	1 448	1 462	1 808	–	–	10	10	11 800	27 000	1 480	500	171
1 362	1 450	1 460	1 808	–	–	10	10	15 600	38 000	2 500	500	110
1 362	1 450	1 460	1 808	–	–	10	10	18 300	48 000	3 100	340	–
1 428	–	–	1 622	1 586	1 568	6	6	1 600	4 000	206	630	–
1 428	1 475	1 485	1 672	–	–	6	6	4 550	12 000	700	600	–
1 428	1 475	1 485	1 672	–	–	6	6	8 150	25 500	1 710	530	120
1 434	1 505	1 515	1 786	–	–	8	8	7 200	17 600	1 000	560	–
1 434	1 500	1 510	1 786	–	–	8	8	11 400	30 500	2 020	500	120
1 434	1 501	1 511	1 786	–	–	8	8	14 300	40 500	2 700	500	95
1 442	–	–	1 908	1 819	1 801	10	10	13 200	31 000	1 980	480	150
1 442	1 533	1 547	1 908	–	–	10	10	13 200	31 000	1 670	480	155
1 442	1 535	1 545	1 908	–	–	10	10	16 600	40 500	2 600	480	110
1 442	1 535	1 545	1 908	–	–	10	10	19 300	51 000	3 250	340	–
1 528	–	–	1 732	1 691	1 673	6	6	1 630	4 150	214	600	–
1 528	1 580	1 590	1 792	–	–	6	6	5 200	14 000	780	560	–
1 528	1 580	1 590	1 792	–	–	6	6	9 150	29 000	1 890	500	110
1 534	1 610	1 620	1 916	–	–	8	8	12 700	34 500	2 250	480	110
1 534	1 606	1 616	1 916	–	–	8	8	16 000	45 000	2 850	480	90

Cylindrical roller bearings with cage

Single row
Non-locating bearings



Design 2
N with lubrication groove and holes

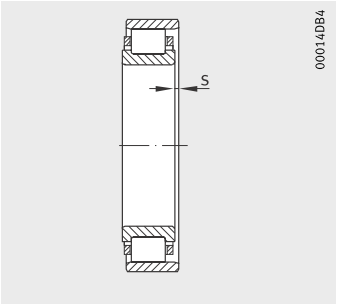


Design 3
NU

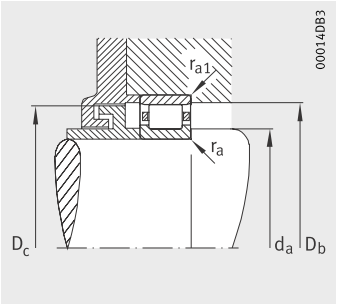
Dimension table (continued) · Dimensions in mm

Designation	Design	Mass	Dimensions											
		m	d	D	B	r	r_1	s[3]	E	F	D_1	d_1	d_s	n_s
		≈kg				min.	min.				≈	≈		
Z-529601.ZL	2[1]	553	**1 600**	1 890	110	7,5	7,5	21	1 799	–	–	1 711	4,8	15
NU28/1600-MA	3	1 270	**1 600**	1 950	200	7,5	7,5	20	1 870	1 690	1 841	–	–	–
NU38/1600-M	3	1 670	**1 600**	1 950	265	7,5	7,5	24,3	1 870	1 690	1 841	–	–	–
NU29/1600-M	3	2 310	**1 600**	2 060	265	9,5	9,5	12,3	1 945	1 715	1 908	–	–	–
Z-529602.ZL	2[1]	631	**1 700**	2 000	115	7,5	7,5	22	1 906	–	–	1 815	4,8	15
NU38/1700-M	3	1 860	**1 700**	2 060	272	7,5	7,5	23,5	1 980	1 790	1 950	–	–	–
NU29/1700-M	3	2 730	**1 700**	2 180	280	9,5	9,5	12,9	2 060	1 820	2 022	–	–	–
Z-529603.ZL	2[1]	717	**1 800**	2 110	120	9,5	9,5	23	2 015	–	–	1 918	8	15
NU38/1800-M	3	2 210	**1 800**	2 180	290	9,5	9,5	25,5	2 095	1 895	2 063	–	–	–
NU29/1800-M	3	3 110	**1 800**	2 300	290	12	12	14	2 175	1 925	2 135	–	–	–
Z-529604.ZL	2[2]	829	**1 900**	2 230	125	9,5	9,5	23	2 129	–	–	2 025	8	15
NU38/1900-M	3	2 560	**1 900**	2 300	300	9,5	9,5	26	2 210	2 000	2 176	–	–	–
NU29/1900-M	3	3 700	**1 900**	2 430	308	12	12	14,4	2 300	2 030	2 257	–	–	–
Z-529605.ZL	2[2]	977	**2 000**	2 350	130	9,5	9,5	24	2 243	–	–	2 132	8	15
NU38/2000-M	3	3 130	**2 000**	2 430	325	9,5	9,5	29,8	2 330	2 110	2 295	–	–	–
Z-540513.ZL	3	627	**2 550**	2 780	100	4	4	14,5	2 710	2 626	2 696	–	–	–

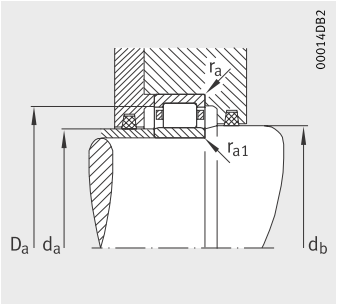
1) With thread M12 for eye bolts on the end faces.
2) With thread M16 for eye bolts on the end faces.



[3] Axial displacement “s” for N and NU



Mounting dimensions for N



Mounting dimensions for NU

Mounting dimensions								Basic load ratings		Fatigue limit load	Limiting speed	Reference speed
d_a		d_b	D_a	D_b	D_c	r_a	r_{a1}	dyn. C_r	stat. C_{0r}	C_{ur}	n_G	n_B
min.	max.	min.	max.	min.	max.	max.	max.	kN	kN	kN	min^{-1}	min^{-1}
1 628	–	–	1 862	1 808	1 790	6	6	1 830	4 750	239	560	–
1 628	1 685	1 695	1 922	–	–	6	6	8 300	24 000	1 540	480	120
1 628	1 685	1 695	1 922	–	–	6	6	11 000	34 000	2 200	480	95
1 634	1 710	1 720	2 026	–	–	8	8	13 400	37 500	2 380	480	100
1 728	–	–	1 972	1 916	1 896	6	6	1 930	5 000	255	530	–
1 728	1 785	1 795	2 032	–	–	6	6	12 200	38 000	2 460	480	85
1 734	1 815	1 825	2 146	–	–	8	8	15 000	42 500	2 600	450	90
1 834	–	–	2 076	2 025	2 005	8	8	2 200	5 850	290	500	–
1 834	1 890	1 900	2 146	–	–	8	8	13 400	42 500	2 650	450	80
1 842	1 920	1 930	2 258	–	–	10	10	16 000	46 500	2 800	430	80
1 934	–	–	2 196	2 139	2 119	8	8	2 500	6 700	325	480	–
1 934	1 995	2 005	2 266	–	–	8	8	15 000	48 000	2 950	430	70
1 942	2 025	2 035	2 388	–	–	10	10	18 300	52 000	3 150	430	75
2 034	–	–	2 316	2 253	2 233	8	8	2 800	7 500	360	480	–
2 034	2 105	2 115	2 396	–	–	8	8	16 600	54 000	3 250	430	67
2 565	–	–	2 765	–	–	3	3	2 750	11 600	470	380	–