



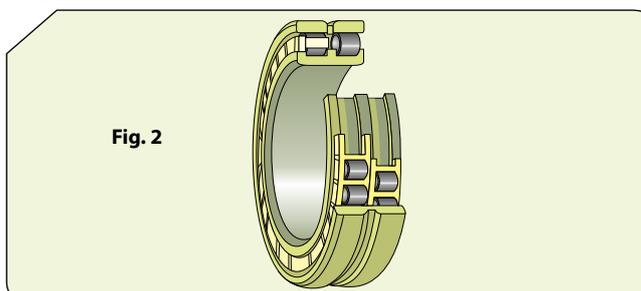
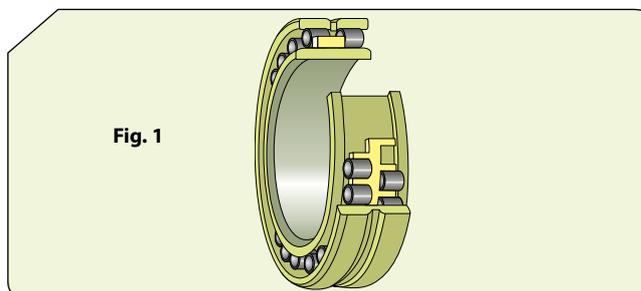
Cuscinetti a due/quattro corone di rulli cilindrici

Cylindrical roller bearings, double/four row



CUSCINETTI A DUE CORONE DI RULLI CILINDRICI

I cuscinetti a due corone di rulli cilindrici sono di due tipi: NNU (**Fig. 1**) ed NN (**Fig. 2**).



I rulli dei cuscinetti di forma NNU sono guidati fra gli orletti dell'anello esterno mentre quelli dei cuscinetti NN sono guidati fra gli orletti dell'anello interno.

L'altro anello è privo di orletti. Questi cuscinetti consentono quindi, entro determinati limiti, spostamenti assiali dell'albero rispetto all'alloggiamento. Essi sono scomponibili, ossia l'anello con gli orletti, i rulli e la gabbia possono essere sfilati dall'altro anello e venire montati separatamente. Il loro montaggio è quindi relativamente semplice.

I cuscinetti a due corone di rulli cilindrici generalmente hanno un piccolo ingombro radiale, una forte capacità di carico e un ridotto cedimento elastico. Le soluzioni costruttive realizzate con questi cuscinetti possono sopportare forti carichi e sono molto rigide. Questi cuscinetti vengono quindi impiegati principalmente nelle macchine utensili e nei laminatoi, ma vengono anche montati nei grossi riduttori industriali.

I cuscinetti a due corone di rulli cilindrici possono essere forniti con foro cilindrico o conico (conicità 1:12). Per consentire di ottenere più facilmente un'efficace lubrificazione, praticamente tutti i cuscinetti sono dotati di una scanalatura anulare e tre o sei fori di lubrificazione sull'anello esterno.

DOUBLE ROW CYLINDRICAL ROLLER BEARINGS

There are two types of double row cylindrical roller bearings: NNU (**Fig. 1**) and NN (**Fig. 2**).

The rollers of the NNU bearings are guided between the flanges of the outer ring while those of the NN bearings are guided between the flanges of the inner ring.

The other ring is flangeless. These bearings therefore enable, within certain limits, axial displacements of the shaft compared to the housing. They are separable, meaning that the flanged ring, the rollers and the cage can be taken out of the other ring and fitted separately. They are consequently relatively easy to assemble.

The double row cylindrical bearings generally have a small radial clearance, a strong load capacity and reduced elastic yielding. The manufacturing solutions fulfilled with these bearings are able to withstand strong loads and are remarkably rigid. These bearings are therefore used mainly in machine tools and roller presses but are also fitted on large industrial reduction units.

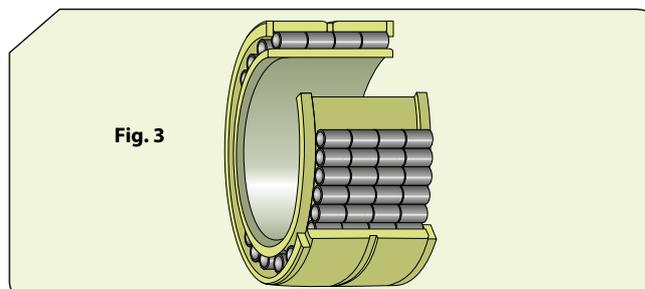
The double row cylindrical bearings can be supplied with cylindrical or tapered bore (taper 1:12). To facilitate efficient lubrication, basically all the bearings have an annular groove and three or six lubrication holes on the outer ring.

CUSCINETTI A QUATTRO CORONE DI RULLI CILINDRICI

I cuscinetti a quattro corone di rulli cilindrici (**Fig. 3**) vengono montati quasi esclusivamente nei laminatoi. Essi hanno un attrito inferiore a quello di altri cuscinetti a rulli e possono venire usati con successo quando è necessario un funzionamento a velocità elevata.

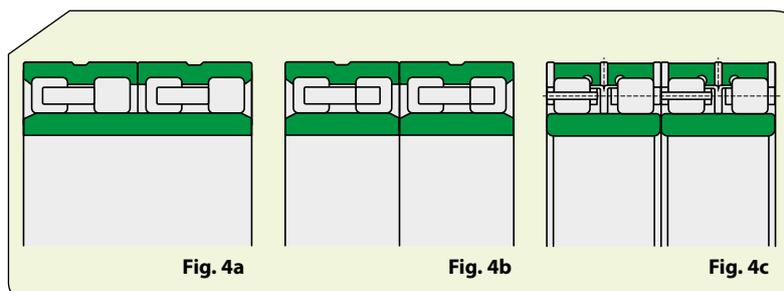
FOUR-ROW CYLINDRICAL ROLLER BEARINGS

The four-row cylindrical roller bearings (**Fig. 3**) are fitted almost exclusively in roller presses. Their friction is lower than that of other ball bearings and can be used successfully for high speed applications.



Vengono forniti nelle esecuzioni FC (**Fig. 4a**), FCP (**Fig. 4b**) ed FCDP (**Fig. 4c**).

They are supplied in the following designs: FC (**Fig. 4a**), FCP (**Fig. 4b**) and FCDP (**Fig. 4c**).



Nei cuscinetti a quattro corone di rulli cilindrici i rulli sono guidati sull'anello esterno fra orletti integrali o non integrali. L'anello interno è privo di orletti; il cuscinetto può quindi far fronte, entro determinati limiti, a spostamenti assiali dell'albero rispetto all'alloggiamento.

A seconda dell'applicazione, i cuscinetti a quattro corone di rulli cilindrici possono essere forniti con foro cilindrico o conico. Gli anelli interni ed esterni possono essere in un solo pezzo o in più pezzi.

I cuscinetti sono quindi in grado di far fronte ad un certo spostamento assiale dell'albero rispetto all'alloggiamento.

DIMENSIONI

Le dimensioni dei cuscinetti **ISB**® ad una corona di rulli cilindrici sono conformi alla norma ISO 15:1998.

I diametri esterno ed interno di molti dei cuscinetti a quattro corone di rulli cilindrici corrispondono ai valori standardizzati per le Serie diametrali 9 o 0.

In the four-row cylindrical roller bearings, the rollers are guided on the outer ring between the integral flanges or non-integral flanges. The inner ring is flangeless; the bearing can therefore withstand, within certain limits, axial displacements of the shaft compared to the housing.

Based on the application involved, the four-row cylindrical roller bearings can be supplied with cylindrical or tapered bore. The inner and outer rings may be in just one piece or in a number of pieces.

The bearings are therefore able to withstand a certain axial displacement of the shaft compared to the housing.

DIMENSIONS

The dimensions of **ISB**® single row cylindrical roller bearings comply with standard ISO 15:1998.

The outside and inside diameters of many of the four-row cylindrical roller bearings match the standard values of the 9 or 0 diameter series.

TOLLERANZE

Tutti i cuscinetti con numero di disegno dell'esecuzione NN sono costruiti secondo le classe di precisione normale; quelli dell'esecuzione NNU hanno una precisione dimensionale conforme alla classe P6 e una precisione di marcia corrispondente alla classe P5.

I cuscinetti a quattro corone di rulli cilindrici con foro cilindrico o conico hanno una precisione dimensionale corrispondente alla classe P6 e una precisione di marcia conforme alla classe P5.

GIUOCO

I cuscinetti a due corone di rulli cilindrici vengono normalmente forniti con giuoco radiale C1 (come richiesto per applicazioni su macchine utensili); questo non viene indicato nell'appellativo. Gli anelli di questi cuscinetti non devono essere scambiati fra di loro altrimenti il giuoco può diventare o troppo grande o troppo piccolo.

I cuscinetti della classe di precisione SP, specialmente quelli della serie NNU 49, possono essere forniti anche con giuoco radiale maggiorato, generalmente quello C3, necessario per le applicazioni nei laminatoi.

I cuscinetti a quattro corone di rulli cilindrici con foro cilindrico e foro conico vengono forniti con giuoco radiale C3 o C4, a seconda dell'applicazione.

DISALLINEAMENTO

I cuscinetti a due e quattro corone di rulli cilindrici non sono progettati per far fronte ad alcun disassamento.

TEMPERATURA DI FUNZIONAMENTO

Sottoposti a speciali trattamenti termici, se muniti di gabbia in acciaio o di ottone possono essere impiegati a temperature fino a + 150°C. Nel caso in cui sia prevista una gabbia in poliammide 6.6 si raggiunge una temperatura di esercizio massima di + 120°C

GABBIE

I cuscinetti a due corone di rulli cilindrici sono generalmente dotati o di una gabbia in un sol pezzo, massiccia, d'ottone a doppio pettine o di due gabbie separate, a pettine, in poliammide 6,6 rinforzata con fibre di vetro (suffisso TN9). Alcuni cuscinetti hanno sue gabbie d'acciaio del tipo a perni.

I cuscinetti a quattro corone di rulli cilindrici montano o due gabbie massicce d'ottone o d'acciaio a doppio pettine o quattro gabbie d'acciaio del tipo a perni.

TOLERANCES

All the bearings with NN design number are manufactured according to the normal precision class; the dimensional precision of those with NNU design number complies with class P6 and a running precision compliant with class P5.

The dimensional precision of the four-row cylindrical roller bearings with cylindrical or tapered bore complies with class P6 and they have a running precision compliant with class P5.

CLEARANCE

The double row cylindrical roller bearings are normally supplied with radial clearance C1 (as requested for applications on machine tools); this is not indicated in the product name. The rings of these bearings must not be swapped, otherwise the clearance becomes too large or too small.

The bearings with precision class SP, especially those of the NNU 49 series, can also be supplied with uprated radial clearance, generally C3, required for applications in roller presses.

The four-row cylindrical roller bearings with cylindrical bore and tapered bore are supplied with radial clearance C3 or C4, based on the application.

MISALIGNMENT

The double and four-row cylindrical roller bearings are not designed to withstand any misalignment.

OPERATING TEMPERATURE

They are put through special heat treatments. When equipped with steel or brass cage, they can be used at temperatures up to + 150°C. When equipped with cage made of polyamide 6.6, the maximum operating temperature is + 120°C

CAGES

The double row cylindrical ball bearings are generally equipped either with a double pronged solid brass cage or two separate pronged polyamide 6.6 cages reinforced with fibreglass (suffix TN9). Some bearings have two pin-type steel cages.

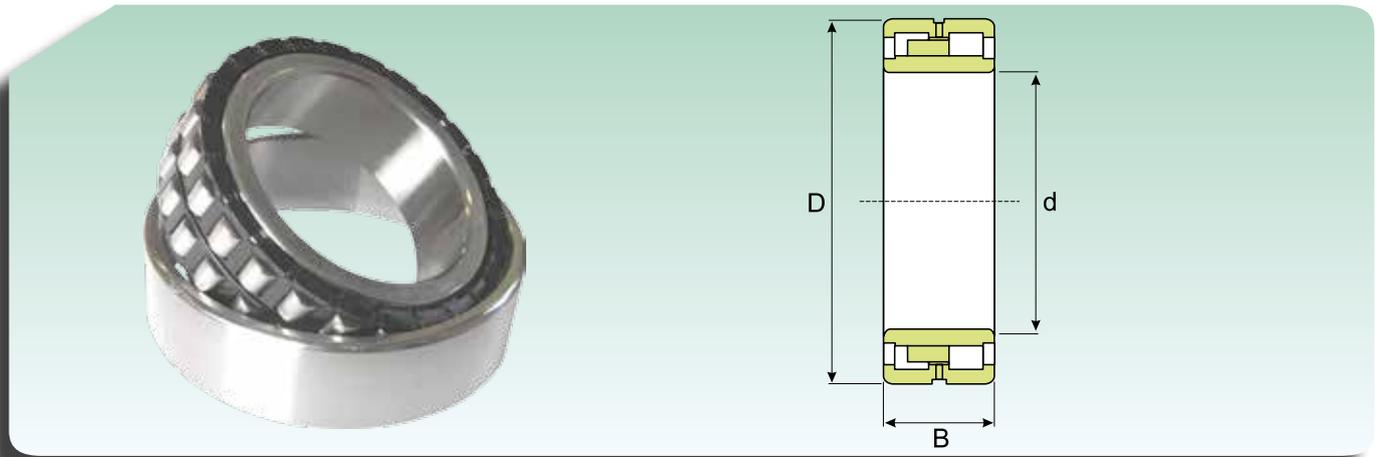
The four-row cylindrical roller bearings fit either two double pronged solid brass or steel cages or four pin-type steel cages.

APPELLATIVI SUPPLEMENTARI

| | |
|------------|--|
| C2 | Giuoco interno radiale inferiore al normale |
| C3 | Giuoco interno radiale maggiore del normale |
| C4 | Giuoco interno radiale maggiore di C3 |
| J | Gabbia stampata in lamiera d'acciaio |
| K | Foro conico, conicità 1:12 |
| M | Gabbia massiccia in ottone in due parti, centrata sui rulli |
| MA | Gabbia massiccia in ottone in due parti centrata sull'anello esterno |
| MB | Gabbia massiccia in ottone in due parti centrata sull'anello interno |
| N | Scanalatura per anello di ancoraggio nel diametro esterno dell'anello esterno |
| NR | Scanalatura e idoneo anello di ancoraggio sull'anello esterno |
| P | Gabbia stampata ad iniezione, in poliammide 6.6 rinforzata con fibre di vetro |
| W33 | Scanalatura circonferenziale e tre fori di lubrificazione sull'anello esterno |
| K30 | Foro conico, conicità 1:30 |
| TN9 | Gabbia stampata ad iniezione, a scatto, in poliammide 6.6 rinforzata con fibre di vetro centrata sulle sfere |

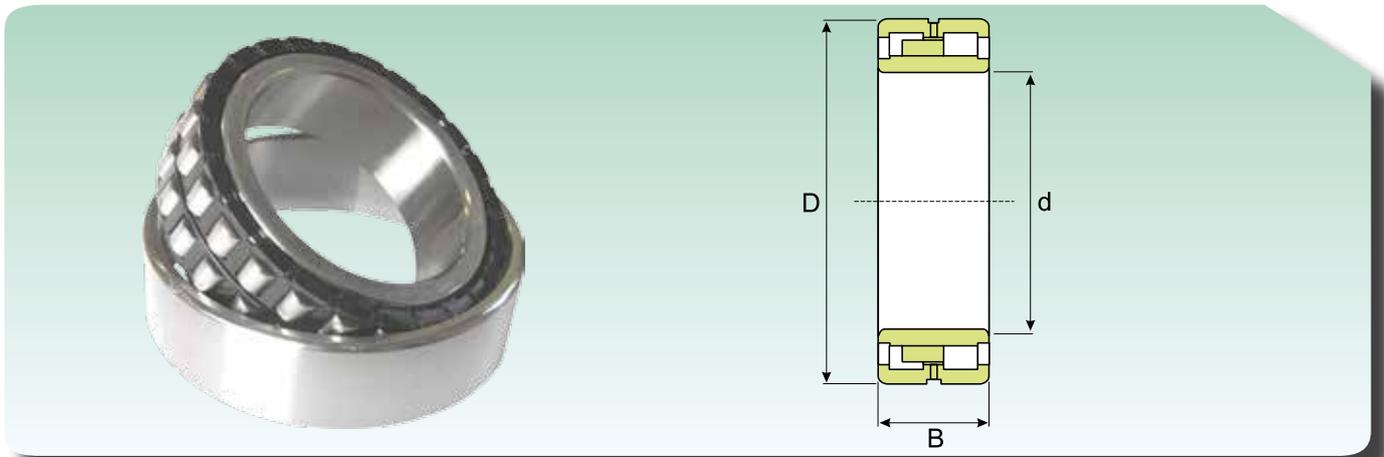
SUPPLEMENTARY DESIGNATIONS

| | |
|------------|---|
| C2 | <i>Internal radial clearance smaller than Normal</i> |
| C3 | <i>Internal radial clearance greater than Normal</i> |
| C4 | <i>Internal radial clearance greater than C3</i> |
| J | <i>Pressed steel cage</i> |
| K | <i>Tapered bore, taper 1:12</i> |
| M | <i>Solid two-piece machined brass cage, centred on the rollers</i> |
| MA | <i>Solid two-piece machined brass cage centered on the outer ring</i> |
| MB | <i>Solid two-piece machined brass cage centered on the inner ring</i> |
| N | <i>Groove for snap ring in outside diameter of outer ring</i> |
| NR | <i>Groove and snap ring on outer ring</i> |
| P | <i>Injection moulded cage made of polyamide 6.6 with fibreglass reinforcement</i> |
| W33 | <i>Circumferential groove and three lubrication holes in outer ring</i> |
| K30 | <i>Tapered bore, taper 1:30</i> |
| TN9 | <i>Shield made of pressed sheet steel on both sides of the bearing</i> |

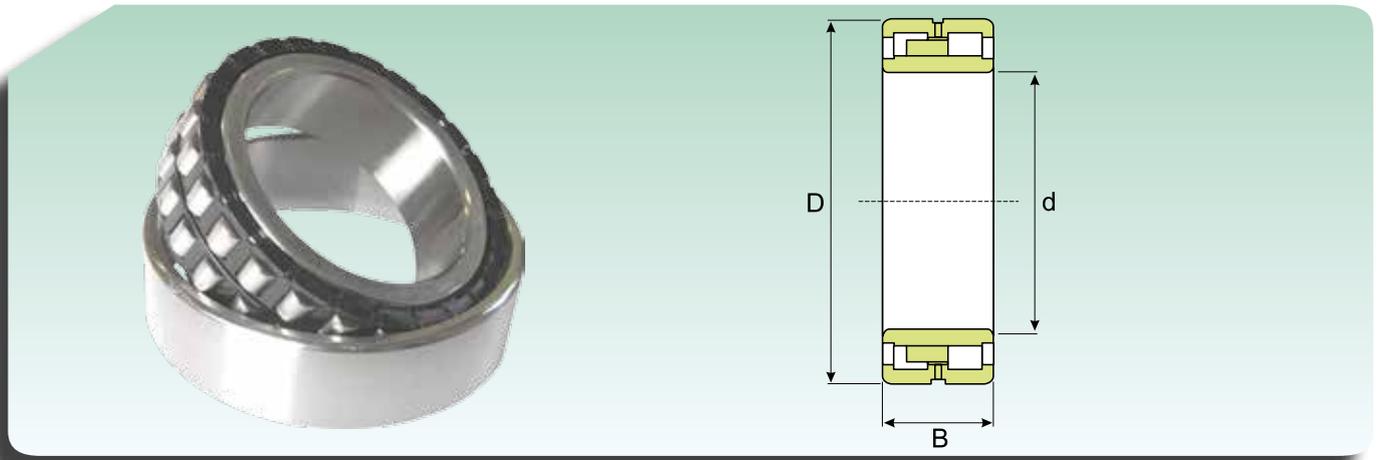
**CUSCINETTI A RULLI CLINDRICI, A DUE CORONE
CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW**


| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (KN) Load rating (KN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|---------------------------|---|-------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | Dinamico C | Statico C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 105 | 175 | 69 | 404.74 | 656.6 | 3870 | 4085 | 6,7 | NNU 4121 K30M/W33 |
| | 175 | 69 | 404.74 | 656.6 | 3870 | 4085 | 6,7 | NNU 4121 M/W33 |
| 110 | 180 | 69 | 409.64 | 695.8 | 3870 | 4085 | 6,95 | NNU 4122 K30M/W33 |
| | 180 | 69 | 409.64 | 695.8 | 3870 | 4085 | 6,95 | NNU 4122 M/W33 |
| 120 | 200 | 80 | 512.54 | 847.7 | 3420 | 3610 | 11 | NNU 4124 K30M/W33 |
| | 200 | 80 | 512.54 | 847.7 | 3420 | 3610 | 11 | NNU 4124 M/W33 |
| 130 | 210 | 80 | 549.78 | 945.7 | 3240 | 3420 | 10,7 | NNU 4126 K30M/W33 |
| | 210 | 80 | 549.78 | 945.7 | 3240 | 3420 | 10,7 | NNU 4126 M/W33 |
| 140 | 225 | 85 | 614.46 | 1019.2 | 3060 | 3230 | 13 | NNU 4128 K30M/W33 |
| | 225 | 85 | 614.46 | 1019.2 | 3060 | 3230 | 13 | NNU 4128 M/W33 |
| 150 | 250 | 100 | 733.04 | 1264.2 | 2700 | 2850 | 18 | NNU 4130 K30M/W33 |
| | 250 | 100 | 733.04 | 1264.2 | 2700 | 2850 | 18 | NNU 4130 M/W33 |
| 160 | 270 | 109 | 916.3 | 1499.4 | 2520 | 2660 | 25 | NNU 4132 K30M/W33 |
| | 270 | 109 | 916.3 | 1499.4 | 2520 | 2660 | 25 | NNU 4132 M/W33 |
| 170 | 280 | 109 | 948.64 | 1597.4 | 2340 | 2470 | 26 | NNU 4134 K30M/W33 |
| | 280 | 109 | 948.64 | 1597.4 | 2340 | 2470 | 26 | NNU 4134 M/W33 |
| 180 | 300 | 118 | 1058.4 | 1793.4 | 2160 | 2280 | 32,5 | NNU 4136 K30M/W33 |
| | 300 | 118 | 1058.4 | 1793.4 | 2160 | 2280 | 32,5 | NNU 4136 M/W33 |
| 190 | 320 | 128 | 1293.6 | 2156 | 2160 | 2280 | 41 | NNU 4138 K30M/W33 |
| | 320 | 128 | 1293.6 | 2156 | 2160 | 2280 | 41 | NNU 4138 M/W33 |
| 200 | 250 | 50 | 237.16 | 588 | 2340 | 2470 | 5,75 | NNU 4840 K/W33 |
| | 250 | 50 | 237.16 | 588 | 2340 | 2470 | 5,75 | NNU 4840/W33 |
| | 340 | 140 | 1440.6 | 2499 | 1980 | 2090 | 51 | NNU 4140 K30M/W33 |
| | 340 | 140 | 1440.6 | 2499 | 1980 | 2090 | 51 | NNU 4140 M/W33 |
| 220 | 370 | 150 | 1617 | 2842 | 1800 | 1900 | 65 | NNU 4144 K30M/W33 |
| | 370 | 150 | 1617 | 2842 | 1800 | 1900 | 65 | NNU 4144 M/W33 |
| 240 | 300 | 60 | 350.84 | 911.4 | 2160 | 2280 | 9,9 | NNU 4848 K/W33 |
| | 300 | 60 | 350.84 | 911.4 | 2160 | 2280 | 9,9 | NNU 4848/W33 |
| | 400 | 160 | 1940.4 | 3577 | 1620 | 1710 | 85 | NNU 4148 K30M/W33 |
| | 400 | 160 | 1940.4 | 3577 | 1620 | 1710 | 85 | NNU 4148 M/W33 |
| 260 | 400 | 140 | 1617 | 3087 | 1620 | 1710 | 63,5 | NNU 4052 KM/W33 |
| | 400 | 140 | 1617 | 3087 | 1620 | 1710 | 63,5 | NNU 4052 M/W33 |
| | 440 | 180 | 2156 | 3822 | 1440 | 1520 | 110 | NNU 4152 K30M/W33 |
| | 440 | 180 | 2156 | 3822 | 1440 | 1520 | 110 | NNU 4152 M/W33 |
| 280 | 350 | 69 | 447.86 | 1176 | 1710 | 1805 | 15,5 | NNU 4856 K/W33 |
| | 350 | 69 | 447.86 | 1176 | 1710 | 1805 | 15,5 | NNU 4856/W33 |
| | 420 | 140 | 1617 | 3087 | 1530 | 1615 | 66,5 | NNU 4056 KM/W33 |
| | 420 | 140 | 1617 | 3087 | 1530 | 1615 | 66,5 | NNU 4056 M/W33 |
| | 460 | 180 | 2499 | 4655 | 1350 | 1425 | 120 | NNU 4156 K30M/W33 |
| | 460 | 180 | 2499 | 4655 | 1350 | 1425 | 120 | NNU 4156 M/W33 |

CUSCINETTI A RULLI CLINIDRICI, A DUE CORONE
CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW

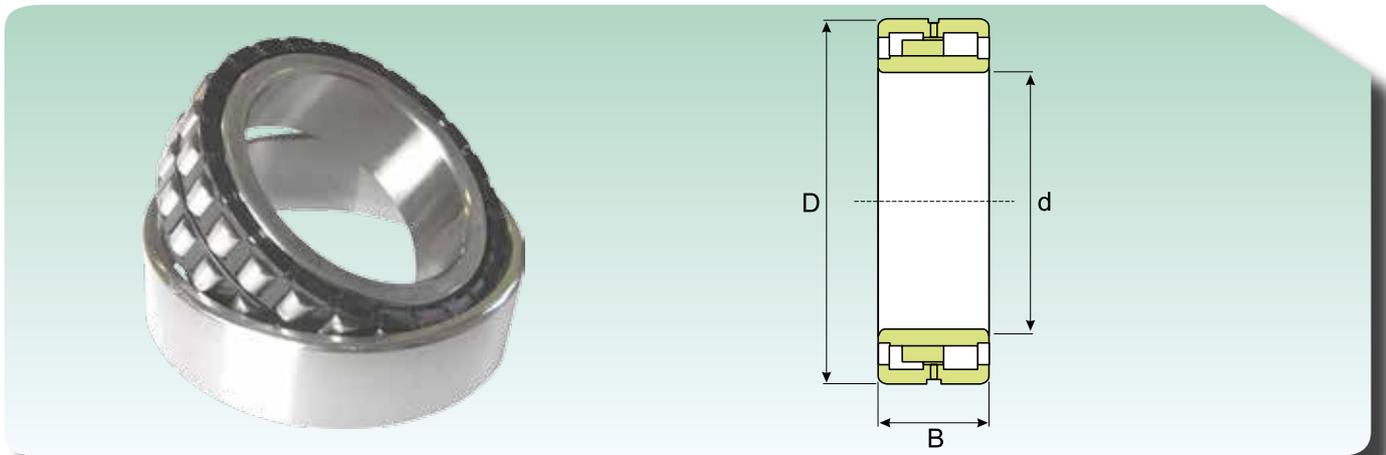


| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (KN) Load rating (KN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|---------------------------|---|-------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | Dinamico C | Statico C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 300 | 380 | 80 | 776.16 | 2077.6 | 1530 | 1615 | 22 | NNU 4860 K/W33 |
| | 380 | 80 | 776.16 | 2077.6 | 1530 | 1615 | 22 | NNU 4860/W33 |
| | 460 | 160 | 1969.8 | 3920 | 1350 | 1425 | 96 | NNU 4060 KM/W33 |
| | 460 | 160 | 1969.8 | 3920 | 1350 | 1425 | 96 | NNU 4060 M/W33 |
| | 500 | 200 | 2802.8 | 5194 | 1260 | 1330 | 155 | NNU 4160 K30M/W33 |
| | 500 | 200 | 2802.8 | 5194 | 1260 | 1330 | 155 | NNU 4160 M/W33 |
| 320 | 400 | 80 | 749.7 | 2038.4 | 1440 | 1520 | 23,5 | NNU 4864 K/W33 |
| | 400 | 80 | 749.7 | 2038.4 | 1440 | 1520 | 23,5 | NNU 4864/W33 |
| | 480 | 160 | 2077.6 | 4214 | 1260 | 1330 | 100 | NNU 4064 KM/W33 |
| | 480 | 160 | 2077.6 | 4214 | 1260 | 1330 | 100 | NNU 4064 M/W33 |
| | 540 | 218 | 3341.8 | 6076 | 1170 | 1235 | 200 | NNU 4164 |
| | 540 | 218 | 3341.8 | 6076 | 1170 | 1235 | 200 | NNU 4164 K30 |
| 340 | 420 | 80 | 631.12 | 1793.4 | 1350 | 1425 | 25 | NNU 4868 K/W33 |
| | 420 | 80 | 631.12 | 1793.4 | 1350 | 1425 | 25 | NNU 4868/W33 |
| | 520 | 180 | 2499 | 4998 | 1170 | 1235 | 140 | NNU 4068 KM/W33 |
| | 520 | 180 | 2499 | 4998 | 1170 | 1235 | 140 | NNU 4068 M/W33 |
| | 580 | 243 | 3939.6 | 7350 | 1080 | 1140 | 260 | NNU 4168 K30M/W33 |
| | 580 | 243 | 3939.6 | 7350 | 1080 | 1140 | 260 | NNU 4168 M/W33 |
| 360 | 540 | 180 | 2753.8 | 5586 | 1080 | 1140 | 142 | NNU 4072 KM/W33 |
| | 540 | 180 | 2753.8 | 5586 | 1080 | 1140 | 142 | NNU 4072 M/W33 |
| | 600 | 243 | 4204.2 | 8330 | 990 | 1045 | 275 | NNU 4172 K30M |
| | 600 | 243 | 4204.2 | 8330 | 990 | 1045 | 275 | NNU 4172 M |
| 380 | 480 | 100 | 932.96 | 2499 | 1170 | 1235 | 44 | NNU 4876 K/W33 |
| | 480 | 100 | 932.96 | 2499 | 1170 | 1235 | 44 | NNU 4876/W33 |
| | 560 | 180 | 2802.8 | 5880 | 1080 | 1140 | 150 | NNU 4076 KM/W33 |
| | 560 | 180 | 2802.8 | 5880 | 1080 | 1140 | 150 | NNU 4076 M/W33 |
| | 620 | 243 | 4204.2 | 8330 | 990 | 1045 | 285 | NNU 4176 K30M |
| | 620 | 243 | 4204.2 | 8330 | 990 | 1045 | 285 | NNU 4176 M |
| 400 | 500 | 100 | 948.64 | 2695 | 1080 | 1140 | 46 | NNU 4880 K/W33 |
| | 500 | 100 | 948.64 | 2695 | 1080 | 1140 | 46 | NNU 4880/W33 |
| | 600 | 200 | 3400.6 | 7056 | 990 | 1045 | 205 | NNU 4080 W33 |
| | 600 | 200 | 3400.6 | 7056 | 990 | 1045 | 205 | NNU 4080 K/W33 |
| | 650 | 250 | 4635.4 | 9310 | 900 | 950 | 325 | NNU 4180 K30M/W33 |
| | 650 | 250 | 4635.4 | 9310 | 900 | 950 | 325 | NNU 4180 M/W33 |
| 420 | 520 | 100 | 970.2 | 2793 | 1080 | 1140 | 48 | NNU 4884 K/W33 |
| | 520 | 100 | 970.2 | 2793 | 1080 | 1140 | 48 | NNU 4884/W33 |
| | 620 | 200 | 3449.6 | 7350 | 855 | 902,5 | 183 | NNU 4084 KM/W33 |
| | 620 | 200 | 3449.6 | 7350 | 855 | 902,5 | 183 | NNU 4084 M/W33 |
| | 700 | 280 | 5390 | 11172 | 855 | 902,5 | 440 | NNU 4184/316275 |
| 440 | 540 | 100 | 989.8 | 2842 | 990 | 1045 | 50 | NNU 4888 K/W33 |
| | 540 | 100 | 989.8 | 2842 | 990 | 1045 | 50 | NNU 4888/W33 |
| | 650 | 212 | 3831.8 | 8134 | 855 | 902,5 | 215 | NNU 4088 KM/W33 |
| | 650 | 212 | 3831.8 | 8134 | 855 | 902,5 | 215 | NNU 4088 M/W33 |
| | 720 | 280 | 5605.6 | 11564 | 810 | 855 | 450 | NNU 4188 K30M/W33 |
| | 720 | 280 | 5605.6 | 11564 | 810 | 855 | 450 | NNU 4188 M/W33 |

**CUSCINETTI A RULLI CLINDRICI, A DUE CORONE
CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW**


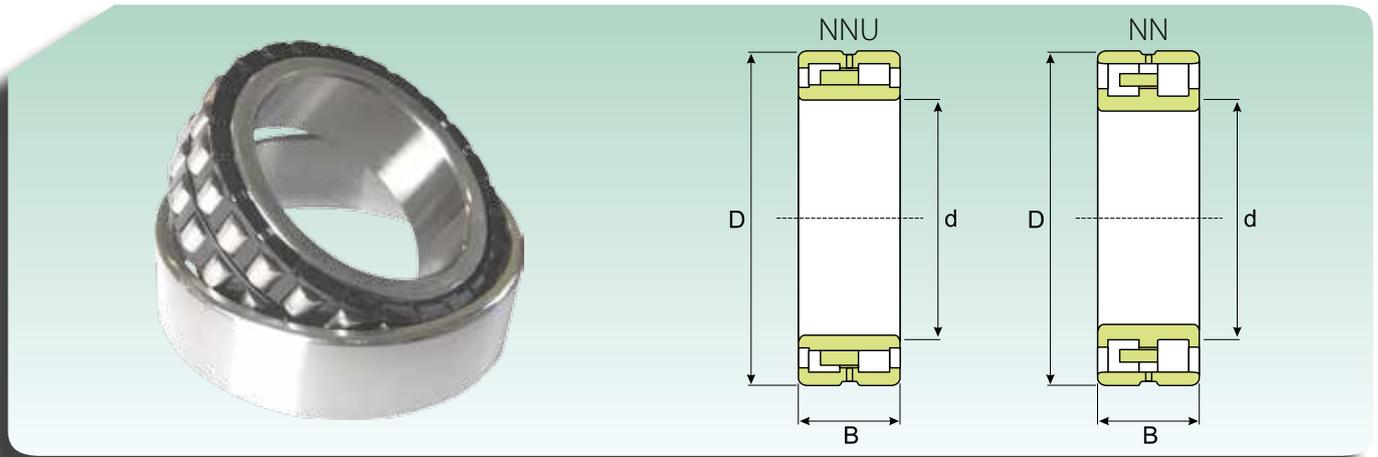
| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (KN) Load rating (KN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|---------------------------|---|-------------|--------------------------|-----------------------------|
| d (mm) | D (mm) | B (mm) | Dinamico C | Statico C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 460 | 580 | 118 | 1166.2 | 3185 | 990 | 1045 | 75 | NNU 4892 K/W33 |
| | 580 | 118 | 1166.2 | 3185 | 990 | 1045 | 75 | NNU 4892/W33 |
| | 680 | 218 | 4204.2 | 9114 | 855 | 902,5 | 240 | NNU 4092 KM/W33 |
| | 680 | 218 | 4204.2 | 9114 | 855 | 902,5 | 240 | NNU 4092 M/W33 |
| | 760 | 300 | 6311.2 | 12642 | 765 | 807,5 | 535 | NNU 4192 K30M |
| | 760 | 300 | 6311.2 | 12642 | 765 | 807,5 | 535 | NNU 4192 M |
| 480 | 700 | 218 | 4312 | 9457 | 810 | 855 | 275 | NNU 4096 KM/W33 |
| | 700 | 218 | 4312 | 9457 | 810 | 855 | 275 | NNU 4096 M/W33 |
| | 790 | 308 | 6899.2 | 14014 | 720 | 760 | 590 | NNU 4196 K30M/W33 |
| | 790 | 308 | 6899.2 | 14014 | 720 | 760 | 590 | NNU 4196 M/W33 |
| 500 | 720 | 218 | 4370.8 | 9800 | 765 | 807,5 | 287 | NNU 40/500 KM/W33 |
| | 720 | 218 | 4370.8 | 9800 | 765 | 807,5 | 287 | NNU 40/500 M/W33 |
| | 830 | 325 | 7330.4 | 14700 | 720 | 760 | 710 | NNU 41/500 K30M/W33 |
| | 830 | 325 | 7330.4 | 14700 | 720 | 760 | 710 | NNU 41/500 M/W33 |
| 530 | 780 | 250 | 5390 | 11956 | 720 | 760 | 420 | NNU 40/530 KM/W33 |
| | 780 | 250 | 5390 | 11956 | 720 | 760 | 420 | NNU 40/530 M/W33 |
| | 870 | 335 | 7653.8 | 15680 | 675 | 712,5 | 790 | NNU 41/530 K30M/W33 |
| | 870 | 335 | 7653.8 | 15680 | 675 | 712,5 | 790 | NNU 41/530 M/W33 |
| 560 | 820 | 258 | 5605.6 | 12642 | 675 | 712,5 | 475 | NNU 40/560 KM/W33 |
| | 820 | 258 | 5605.6 | 12642 | 675 | 712,5 | 475 | NNU 40/560 M/W33 |
| | 920 | 355 | 8624 | 17934 | 603 | 636,5 | 930 | NNU 41/560 K30M/W33X |
| | 920 | 355 | 8624 | 17934 | 603 | 636,5 | 930 | NNU 41/560 M/W33 |
| 600 | 870 | 272 | 6683.6 | 15288 | 630 | 665 | 530 | NNU 40/600 KM/W33 |
| | 870 | 272 | 6683.6 | 15288 | 630 | 665 | 530 | NNU 40/600 M/W33 |
| | 980 | 375 | 9702 | 20776 | 567 | 598,5 | 1100 | NNU 41/600 K30M/W33 |
| | 980 | 375 | 9702 | 20776 | 567 | 598,5 | 1100 | NNU 41/600 M/W33 |
| 630 | 920 | 290 | 7497 | 17248 | 567 | 598,5 | 635 | NNU 40/630 KM/W33 |
| | 920 | 290 | 7497 | 17248 | 567 | 598,5 | 635 | NNU 40/630 M/W33 |
| | 1030 | 400 | 10780 | 23520 | 540 | 570 | 1330 | NNU 41/630 K30M/W33 |
| | 1030 | 400 | 10780 | 23520 | 540 | 570 | 1330 | NNU 41/630 M/W33 |
| 670 | 980 | 308 | 8251.6 | 19208 | 540 | 570 | 765 | NNU 40/670 KM/W33 |
| | 980 | 308 | 8251.6 | 19208 | 540 | 570 | 765 | NNU 40/670 M/W33 |
| | 1090 | 412 | 11858 | 24990 | 477 | 503,5 | 1500 | NNU 41/670 K30M/W33 |
| | 1090 | 412 | 11858 | 24990 | 477 | 503,5 | 1500 | NNU 41/670 M/W33 |
| 710 | 1030 | 315 | 9163 | 21168 | 504 | 532 | 850 | NNU 40/710 KM/W33 |
| | 1030 | 315 | 9163 | 21168 | 504 | 532 | 850 | NNU 40/710 M/W33 |
| | 1150 | 438 | 13132 | 27930 | 450 | 475 | 1790 | NNU 41/710 K30M/W33 |
| | 1150 | 438 | 13132 | 27930 | 450 | 475 | 1790 | NNU 41/710 M/W33 |
| 750 | 920 | 170 | 3616.2 | 9996 | 540 | 570 | 240 | NN 48/750 K30/H1W33 |
| | 920 | 170 | 3616.2 | 9996 | 540 | 570 | 240 | NN 48/750/H1W33 |
| | 1090 | 335 | 9996 | 23520 | 450 | 475 | 925 | NNU 40/750 KM/W33 |
| | 1090 | 335 | 9996 | 23520 | 450 | 475 | 925 | NNU 40/750 M/W33 |
| | 1220 | 475 | 15778 | 34790 | 405 | 427,5 | 2230 | NNU 41/750 K30M/W33 |
| | 1220 | 475 | 15778 | 34790 | 405 | 427,5 | 2230 | NNU 41/750 M/W33 |

CUSCINETTI A RULLI CLINIDRICI, A DUE CORONE
CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW



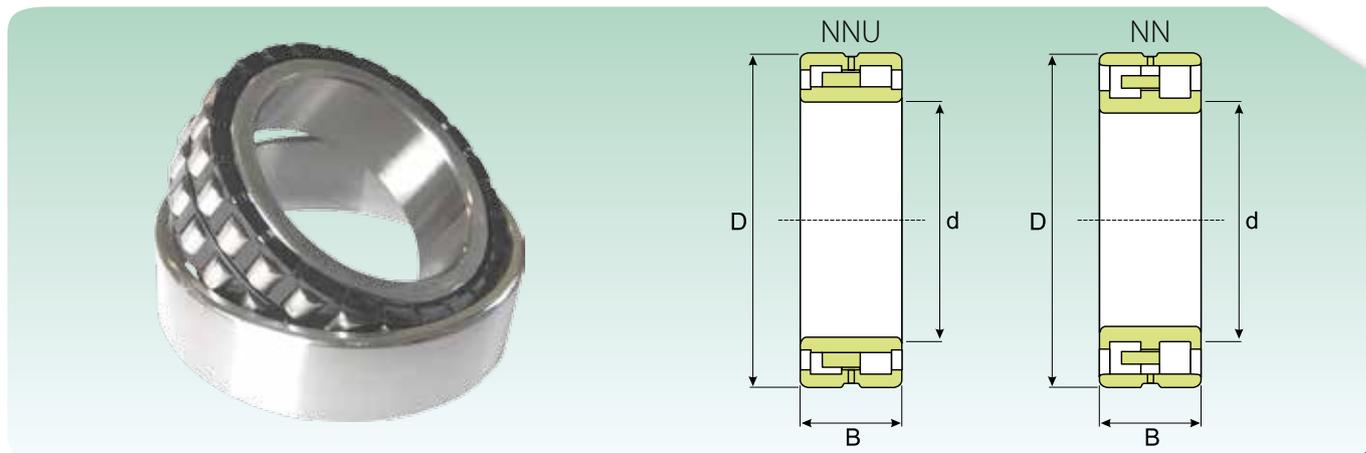
| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (KN) Load rating (KN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|---------------------------|---|-------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | Dinamico C | Statico C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 800 | 1150 | 345 | 10584 | 25480 | 432 | 456 | 1140 | NNU 40/800 KM/W33 |
| | 1150 | 345 | 10584 | 25480 | 432 | 456 | 1140 | NNU 40/800 M/W33 |
| | 1280 | 475 | 16170 | 35770 | 387 | 408,5 | 2390 | NNU 41/800 K30M/W33 |
| | 1280 | 475 | 16170 | 35770 | 387 | 408,5 | 2390 | NNU 41/800 M/W33 |
| 850 | 1220 | 365 | 11466 | 27930 | 387 | 408,5 | 1340 | NNU 40/850 KM/W33 |
| | 1220 | 365 | 11466 | 27930 | 387 | 408,5 | 1340 | NNU 40/850 M/W33 |
| | 1360 | 500 | 19404 | 44100 | 360 | 380 | 2900 | NNU 41/850 K30M/W33 |
| | 1360 | 500 | 19404 | 44100 | 360 | 380 | 2900 | NNU 41/850 M/W33 |
| 900 | 1280 | 375 | 12544 | 30870 | 360 | 380 | 1500 | NNU 40/900 KM/W33 |
| | 1280 | 375 | 12544 | 30870 | 360 | 380 | 1500 | NNU 40/900 M/W33 |
| | 1420 | 515 | 21560 | 46550 | 324 | 342 | 3180 | NNU 41/900 K30M/W33 |
| | 1420 | 515 | 21560 | 46550 | 324 | 342 | 3180 | NNU 41/900 M/W33 |
| 950 | 1360 | 412 | 13916 | 34790 | 342 | 361 | 1900 | NNU 40/950 KM/W33 |
| | 1360 | 412 | 13916 | 34790 | 342 | 361 | 1900 | NNU 40/950 M/W33 |
| | 1500 | 545 | 24990 | 55860 | 306 | 323 | 3830 | NNU 41/950 K30M/W33 |
| | 1500 | 545 | 24990 | 55860 | 306 | 323 | 3830 | NNU 41/950 M/W33 |
| 1000 | 1320 | 315 | 8408.4 | 25480 | 360 | 380 | 1200 | NN 49/1000 K/W33X |
| | 1320 | 315 | 8408.4 | 25480 | 360 | 380 | 1200 | NN 49/1000 W33X |
| | 1420 | 412 | 15092 | 37240 | 306 | 323 | 2000 | NNU 40/1000 KM/W33 |
| | 1420 | 412 | 15092 | 37240 | 306 | 323 | 2000 | NNU 40/1000 M/W33 |
| | 1580 | 580 | 26950 | 60760 | 270 | 285 | 4270 | NNU 41/1000 K30M/W33 |
| | 1580 | 580 | 26950 | 60760 | 270 | 285 | 4270 | NNU 41/1000 M/W33 |
| 1060 | 1660 | 600 | 29694 | 68110 | 252 | 266 | 5070 | NNU 41/1060 K30M/W33 |
| | 1660 | 600 | 29694 | 68110 | 252 | 266 | 5070 | NNU 41/1060 M/W33 |
| 1120 | 1750 | 630 | 32928 | 74970 | 252 | 266 | 5600 | NNU 41/1120 K30M/W33 |
| | 1750 | 630 | 32928 | 74970 | 252 | 266 | 5600 | NNU 41/1120 M/W33 |
| 1180 | 1850 | 670 | 36162 | 83300 | 216 | 228 | 7200 | NNU 41/1180 K30M/W33 |
| | 1850 | 670 | 36162 | 83300 | 216 | 228 | 7200 | NNU 41/1180 M/W33 |
| 1250 | 1950 | 710 | 40964 | 96040 | 198 | 209 | 8000 | NNU 41/1250 K30M/W33 |
| | 1950 | 710 | 40964 | 96040 | 198 | 209 | 8000 | NNU 41/1250 M/W33 |
| 1320 | 1720 | 400 | 13524 | 41650 | 252 | 266 | 3060 | NN 49/1320 W33 |
| | 1720 | 400 | 13524 | 41650 | 252 | 266 | 3060 | NN 49/1320 K/W33 |
| | 2060 | 750 | 44786 | 103880 | 171 | 180,5 | 9400 | NNU 41/1320 K30M/W33 |
| | 2060 | 750 | 44786 | 103880 | 171 | 180,5 | 9400 | NNU 41/1320 M/W33 |
| 1400 | 2180 | 775 | 48510 | 113680 | 153 | 161,5 | 10700 | NNU 41/1400 K30M/W33 |
| | 2180 | 775 | 48510 | 113680 | 153 | 161,5 | 10700 | NNU 41/1400 M/W33 |
| 1500 | 2300 | 800 | 51744 | 129360 | 135 | 142,5 | 12300 | NNU 41/1500 K30M/W33 |
| | 2300 | 800 | 51744 | 129360 | 135 | 142,5 | 12300 | NNU 41/1500 M/W33 |

CUSCINETTI A RULLI CILINDRICI, A DUE CORONE, DI ALTA PRECISIONE CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW, HIGH-PRECISION



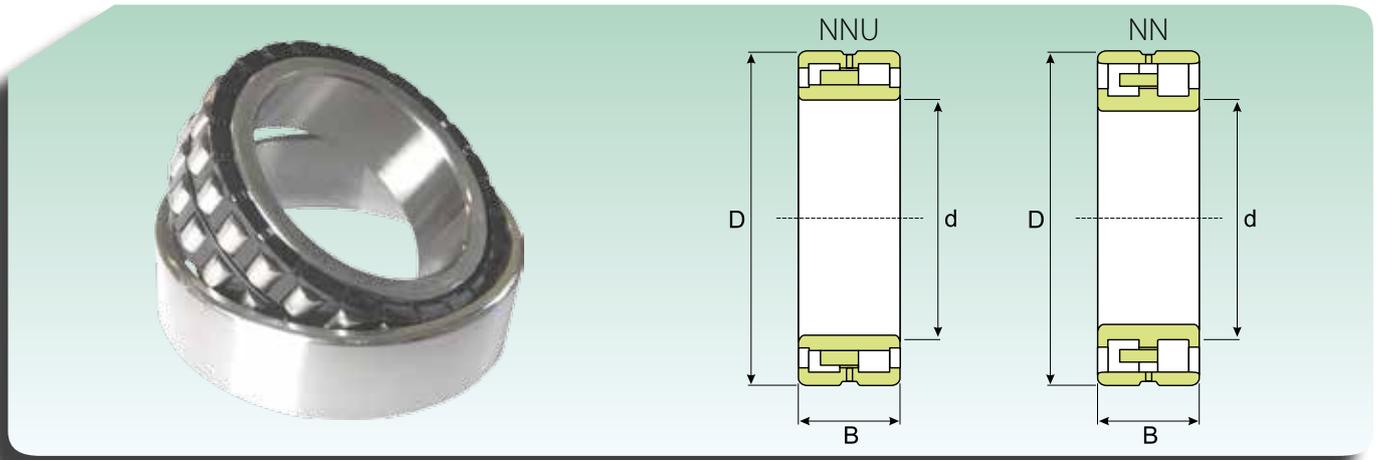
| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (kN) Load rating (kN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|-------------------------------------|---|-------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | Dinamico Dynamic C | Statico Static C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 25 | 47 | 16 | 25,48 | 29,4 | 18430 | 21340 | 0,12 | NN 3005 K/SP |
| | 47 | 16 | 25,48 | 29,4 | 18430 | 21340 | 0,12 | NN 3005/SP |
| 30 | 55 | 19 | 30,184 | 36,75 | 15520 | 17460 | 0,19 | NN 3006 KTN/SP |
| | 55 | 19 | 30,184 | 36,75 | 15520 | 17460 | 0,19 | NN 3006 TN/SP |
| 35 | 62 | 20 | 38,318 | 49 | 13580 | 15520 | 0,25 | NN 3007 K/SP |
| | 62 | 20 | 38,318 | 49 | 13580 | 15520 | 0,25 | NN 3007/SP |
| 40 | 68 | 21 | 42,042 | 54,88 | 11640 | 13580 | 0,30 | NN 3008 KTN/SP |
| | 68 | 21 | 42,042 | 54,88 | 11640 | 13580 | 0,30 | NN 3008 TN/SP |
| 45 | 75 | 23 | 49,098 | 64,19 | 10670 | 12610 | 0,38 | NN 3009 KTN/SP |
| | 75 | 23 | 49,098 | 64,19 | 10670 | 12610 | 0,38 | NN 3009 TN/SP |
| 50 | 80 | 23 | 51,744 | 72,03 | 9700 | 11640 | 0,42 | NN 3010 KTN/SP |
| | 80 | 23 | 51,744 | 72,03 | 9700 | 11640 | 0,42 | NN 3010 TN/SP |
| 55 | 90 | 26 | 67,914 | 94,57 | 9215 | 10670 | 0,62 | NN 3011 KTN/SP |
| | 90 | 26 | 67,914 | 94,57 | 9215 | 10670 | 0,62 | NN 3011 TN/SP |
| 60 | 95 | 26 | 72,226 | 103,88 | 8730 | 9700 | 0,66 | NN 3012 KTN/SP |
| | 95 | 26 | 72,226 | 103,88 | 8730 | 9700 | 0,66 | NN 3012 TN/SP |
| 65 | 100 | 26 | 74,97 | 113,68 | 8245 | 9215 | 0,71 | NN 3013 KTN/SP |
| | 100 | 26 | 74,97 | 113,68 | 8245 | 9215 | 0,71 | NN 3013 TN/SP |
| 70 | 110 | 30 | 94,864 | 147 | 7275 | 8245 | 1,00 | NN 3014 KTN/SP |
| | 110 | 30 | 94,864 | 147 | 7275 | 8245 | 1,00 | NN 3014 TN/SP |
| 75 | 115 | 30 | 94,864 | 147 | 6790 | 7760 | 1,10 | NN 3015 KTN/SP |
| | 115 | 30 | 94,864 | 147 | 6790 | 7760 | 1,10 | NN 3015 TN/SP |
| 80 | 125 | 34 | 116,62 | 182,28 | 6499 | 7275 | 1,45 | NN 3016 KTN/SP |
| | 125 | 34 | 116,62 | 182,28 | 6499 | 7275 | 1,45 | NN 3016 TN/SP |
| 85 | 130 | 34 | 122,5 | 199,92 | 6111 | 6790 | 1,60 | NN 3017 KTN9/SP |
| | 130 | 34 | 122,5 | 199,92 | 6111 | 6790 | 1,60 | NN 3017 TN9/SP |
| 90 | 140 | 37 | 135,24 | 211,68 | 5820 | 6499 | 2,00 | NN 3018 KTN9/SP |
| | 140 | 37 | 135,24 | 211,68 | 5820 | 6499 | 2,00 | NN 3018 TN9/SP |
| 95 | 145 | 37 | 139,16 | 227,36 | 5432 | 6111 | 2,10 | NN 3019 KTN9/SP |
| | 145 | 37 | 139,16 | 227,36 | 5432 | 6111 | 2,10 | NN 3019 TN9/SP |
| 100 | 140 | 40 | 125,44 | 249,9 | 5432 | 6111 | 1,90 | NNU 4920 SPW33 |
| | 140 | 40 | 125,44 | 249,9 | 5432 | 6111 | 1,90 | NNU 4920 K/SPW33 |
| | 150 | 37 | 147,98 | 245 | 5141 | 5820 | 2,20 | NN 3020 KTN9/SP |
| | 150 | 37 | 147,98 | 245 | 5141 | 5820 | 2,20 | NN 3020 TN9/SP |
| 105 | 145 | 40 | 127,4 | 254,8 | 5141 | 5820 | 2,00 | NNU 4921 SPW33 |
| | 145 | 40 | 127,4 | 254,8 | 5141 | 5820 | 2,00 | NNU 4921 K/SPW33 |
| | 160 | 41 | 186,2 | 298,9 | 4850 | 5432 | 2,70 | NN 3021 KTN9/SP |
| | 160 | 41 | 186,2 | 298,9 | 4850 | 5432 | 2,70 | NN 3021 TN9/SP |

CUSCINETTI A RULLI CILINDRICI, A DUE CORONE, DI ALTA PRECISIONE CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW, HIGH-PRECISION



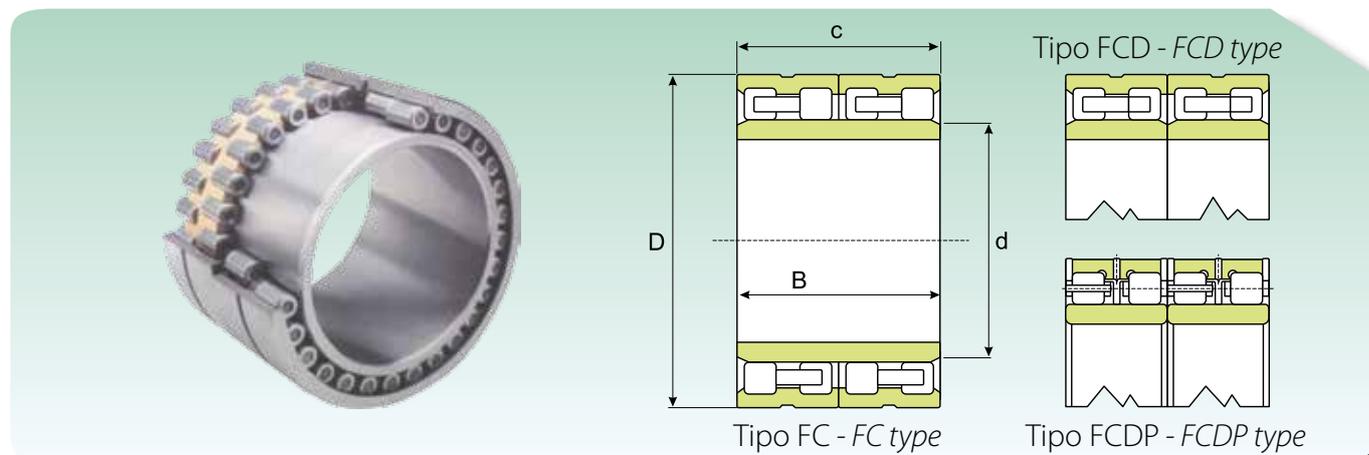
| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (kN) Load rating (kN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|-------------------------------------|---|-------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | Dinamico Dynamic C | Statico Static C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 110 | 150 | 40 | 129,36 | 264,6 | 5141 | 5820 | 2,05 | NNU 4922 SPW33 |
| | 150 | 40 | 129,36 | 264,6 | 5141 | 5820 | 2,05 | NNU 4922 K/SPW33 |
| | 170 | 45 | 215,6 | 352,8 | 4656 | 5141 | 3,40 | NN 3022 KTN9/SP |
| | 170 | 45 | 215,6 | 352,8 | 4656 | 5141 | 3,40 | NN 3022 TN9/SP |
| 120 | 165 | 45 | 172,48 | 333,2 | 4656 | 5141 | 2,80 | NNU 4924 SPW33 |
| | 165 | 45 | 172,48 | 333,2 | 4656 | 5141 | 2,80 | NNU 4924 K/SPW33 |
| | 180 | 46 | 224,42 | 382,2 | 4365 | 4850 | 3,70 | NN 3024 KTN9/SP |
| | 180 | 46 | 224,42 | 382,2 | 4365 | 4850 | 3,70 | NN 3024 TN9/SP |
| 130 | 180 | 50 | 183,26 | 382,2 | 4171 | 4656 | 3,85 | NNU 4926 SPW33 |
| | 180 | 50 | 183,26 | 382,2 | 4171 | 4656 | 3,85 | NNU 4926 K/SPW33 |
| | 200 | 52 | 280,28 | 470,4 | 3880 | 4365 | 5,55 | NN 3026 KTN9/SP |
| | 200 | 52 | 280,28 | 470,4 | 3880 | 4365 | 5,55 | NN 3026 TN9/SP |
| 140 | 190 | 50 | 186,2 | 392 | 3880 | 4365 | 4,10 | NNU 4928 SPW33 |
| | 190 | 50 | 186,2 | 392 | 3880 | 4365 | 4,10 | NNU 4928 K/SPW33 |
| | 210 | 53 | 291,06 | 509,6 | 3686 | 4171 | 6,00 | NN 3028 K/SPW33 |
| | 210 | 53 | 291,06 | 509,6 | 3686 | 4171 | 6,00 | NN 3028/SPW33 |
| 150 | 210 | 60 | 323,4 | 641,9 | 3686 | 4171 | 6,25 | NNU 4930 SPW33 |
| | 210 | 60 | 323,4 | 641,9 | 3686 | 4171 | 6,25 | NNU 4930 K/SPW33 |
| | 225 | 56 | 323,4 | 558,6 | 3492 | 3880 | 7,30 | NN 3030 K/SPW33 |
| | 225 | 56 | 323,4 | 558,6 | 3492 | 3880 | 7,30 | NN 3030/SPW33 |
| 160 | 220 | 60 | 323,4 | 666,4 | 3492 | 3880 | 6,60 | NNU 4932 SPW33 |
| | 220 | 60 | 323,4 | 666,4 | 3492 | 3880 | 6,60 | NNU 4932 K/SPW33 |
| | 240 | 60 | 361,62 | 641,9 | 3298 | 3686 | 8,80 | NN 3032 K/SPW33 |
| | 240 | 60 | 361,62 | 641,9 | 3298 | 3686 | 8,80 | NN 3032/SPW33 |
| 170 | 230 | 60 | 329,28 | 681,1 | 3298 | 3686 | 6,95 | NNU 4934 SPW33 |
| | 230 | 60 | 329,28 | 681,1 | 3298 | 3686 | 6,95 | NNU 4934 K/SPW33 |
| | 260 | 67 | 447,86 | 784 | 3104 | 3492 | 12,0 | NN 3034 K/SPW33 |
| | 260 | 67 | 447,86 | 784 | 3104 | 3492 | 12,0 | NN 3034/SPW33 |
| 180 | 250 | 69 | 393,96 | 833 | 2910 | 3298 | 10,5 | NNU 4936 SPW33 |
| | 250 | 69 | 393,96 | 833 | 2910 | 3298 | 10,5 | NNU 4936 K/SPW33 |
| | 280 | 74 | 549,78 | 980 | 2716 | 3104 | 16,0 | NN 3036 K/SPW33 |
| | 280 | 74 | 549,78 | 980 | 2716 | 3104 | 16,0 | NN 3036/SPW33 |
| 190 | 260 | 69 | 393,96 | 862,4 | 2716 | 3104 | 11,0 | NNU 4938 SPW33 |
| | 260 | 69 | 393,96 | 862,4 | 2716 | 3104 | 11,0 | NNU 4938 K/SPW33 |
| | 290 | 75 | 582,12 | 1058,4 | 2522 | 2910 | 17,0 | NN 3038 K/SPW33 |
| | 290 | 75 | 582,12 | 1058,4 | 2522 | 2910 | 17,0 | NN 3038/SPW33 |
| 200 | 280 | 80 | 474,32 | 1019,2 | 2522 | 2910 | 15,0 | NNU 4940 SPW33 |
| | 280 | 80 | 474,32 | 1019,2 | 2522 | 2910 | 15,0 | NNU 4940 K/SPW33 |
| | 310 | 82 | 631,12 | 1117,2 | 2328 | 2716 | 21,0 | NN 3040 K/SPW33 |
| | 310 | 82 | 631,12 | 1117,2 | 2328 | 2716 | 21,0 | NN 3040/SPW33 |
| 220 | 300 | 80 | 501,76 | 1117,2 | 2328 | 2716 | 16,5 | NNU 4944 SPW33 |
| | 300 | 80 | 501,76 | 1117,2 | 2328 | 2716 | 16,5 | NNU 4944 K/SPW33 |
| | 340 | 90 | 792,82 | 1430,8 | 2134 | 2522 | 27,5 | NN 3044 K/SPW33 |
| | 340 | 90 | 792,82 | 1430,8 | 2134 | 2522 | 27,5 | NN 3044/SPW33 |

CUSCINETTI A RULLI CILINDRICI, A DUE CORONE, DI ALTA PRECISIONE CYLINDRICAL ROLLER BEARINGS, DOUBLE ROW, HIGH-PRECISION

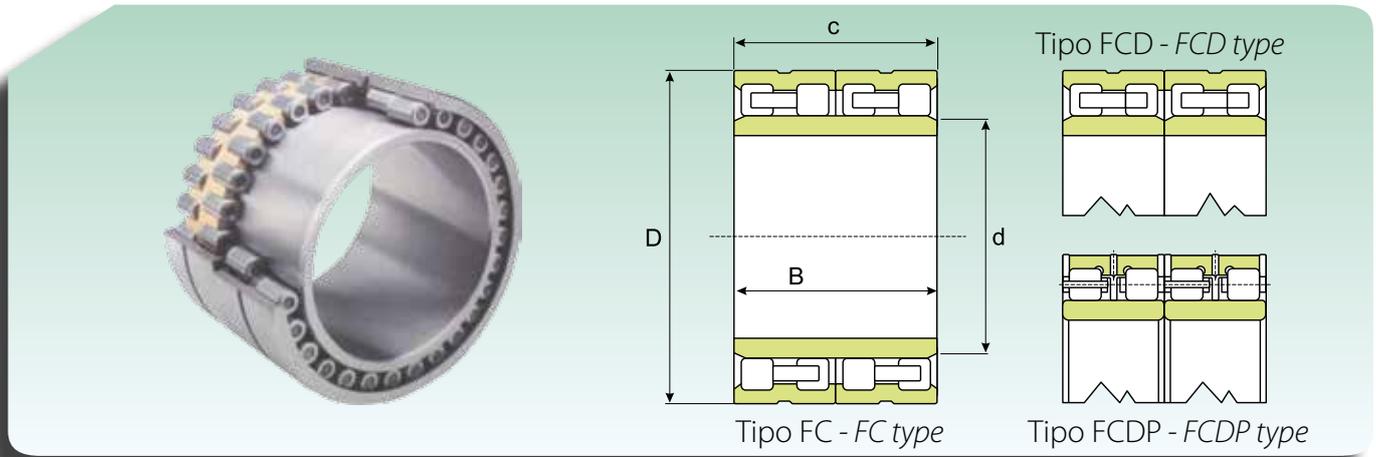


| Dimensioni (mm) Dimension (mm) | | | Coefficiente di carico (kN) Load rating (kN) | | Velocità limite (giri/min) Speed limit (Rpm) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|---|-------------------------------------|---|-------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | Dinamico Dynamic C | Statico Static C ₀ | Lubrificazione Lubrication | | | |
| | | | | | Grasso Grease | Olio Oil | | |
| 240 | 320 | 80 | 517,44 | 1195,6 | 2134 | 2522 | 17,5 | NNU 4948 SPW33 |
| | 320 | 80 | 517,44 | 1195,6 | 2134 | 2522 | 17,5 | NNU 4948 K/SPW33 |
| | 360 | 92 | 825,16 | 1528,8 | 1940 | 2328 | 30,5 | NN 3048 K/SPW33 |
| | 360 | 92 | 825,16 | 1528,8 | 1940 | 2328 | 30,5 | NN 3048/SPW33 |
| 260 | 360 | 100 | 733,04 | 1666 | 1940 | 2328 | 30,5 | NNU 4952 SPW33 |
| | 360 | 100 | 733,04 | 1666 | 1940 | 2328 | 30,5 | NNU 4952 K/SPW33 |
| | 400 | 104 | 999,6 | 1891,4 | 1843 | 2134 | 44,0 | NN 3052 K/SPW33 |
| | 400 | 104 | 999,6 | 1891,4 | 1843 | 2134 | 44,0 | NN 3052/SPW33 |
| 280 | 380 | 100 | 749,7 | 1764 | 1843 | 2134 | 32,5 | NNU 4956 SPW33 |
| | 380 | 100 | 749,7 | 1764 | 1843 | 2134 | 32,5 | NNU 4956 K/SPW33 |
| | 420 | 106 | 1058,4 | 2038,4 | 1746 | 1940 | 47,5 | NN 3056 K/SPW33 |
| | 420 | 106 | 1058,4 | 2038,4 | 1746 | 1940 | 47,5 | NN 3056/SPW33 |
| 300 | 420 | 118 | 999,6 | 2312,8 | 1746 | 1940 | 48,0 | NNU 4960 SPW33 |
| | 420 | 118 | 999,6 | 2312,8 | 1746 | 1940 | 48,0 | NNU 4960 K/SPW33 |
| | 460 | 118 | 1225 | 2352 | 1649 | 1843 | 66,5 | NN 3060 K/SPW33 |
| | 460 | 118 | 1225 | 2352 | 1649 | 1843 | 66,5 | NN 3060/SPW33 |
| 320 | 440 | 118 | 1038,8 | 2450 | 1649 | 1843 | 50,0 | NNU 4964 SPW33 |
| | 440 | 118 | 1038,8 | 2450 | 1649 | 1843 | 50,0 | NNU 4964 K/SPW33 |
| | 480 | 121 | 1293,6 | 2548 | 1552 | 1746 | 71,0 | NN 3064 K/SPW33 |
| 340 | 460 | 118 | 1078 | 2597 | 1455 | 1649 | 53,0 | NNU 4968 SPW33 |
| | 460 | 118 | 1078 | 2597 | 1455 | 1649 | 53,0 | NNU 4968 K/SPW33 |
| | 520 | 133 | 1617 | 3185 | 1358 | 1552 | 94,5 | NN 3068 K/SPW33 |
| 360 | 480 | 118 | 1097,6 | 2744 | 1455 | 1649 | 55,0 | NNU 4972 SPW33 |
| | 480 | 118 | 1097,6 | 2744 | 1455 | 1649 | 55,0 | NNU 4972 K/SPW33 |
| | 540 | 134 | 1685,6 | 3381 | 1261 | 1455 | 102 | NN 3072 K/SPW33 |
| 380 | 520 | 140 | 1421 | 3528 | 1261 | 1455 | 83,5 | NNU 4976 SPW33 |
| | 520 | 140 | 1421 | 3528 | 1261 | 1455 | 83,5 | NNU 4976 K/SPW33 |
| | 560 | 135 | 1646,4 | 3381 | 1261 | 1455 | 105 | NN 3076 K/SPW33 |
| 400 | 540 | 140 | 1440,6 | 3724 | 1261 | 1455 | 87,5 | NNU 4980 SPW33 |
| | 540 | 140 | 1440,6 | 3724 | 1261 | 1455 | 87,5 | NNU 4980 K/SPW33 |
| | 600 | 148 | 2116,8 | 4410 | 1164 | 1358 | 135 | NN 3080 K/SPW33 |
| 420 | 560 | 140 | 1479,8 | 3920 | 1164 | 1358 | 91,0 | NNU 4984 SPW33 |
| | 560 | 140 | 1479,8 | 3920 | 1164 | 1358 | 91,0 | NNU 4984 K/SPW33 |
| | 620 | 150 | 2077,6 | 4410 | 1067 | 1261 | 140 | NN 3084 K/SPW33 |
| 460 | 620 | 160 | 2048,2 | 5390 | 970 | 1164 | 130 | NNU 4992 SPW33 |
| | 620 | 160 | 2048,2 | 5390 | 970 | 1164 | 130 | NNU 4992 K/SPW33 |
| | 680 | 163 | 2548 | 5390 | 970 | 1164 | 190 | NN 3092 K/SPW33 |
| 500 | 670 | 170 | 2283,4 | 5978 | 921,5 | 1067 | 165 | NNU 49/500 SPW33X |
| | 670 | 170 | 2283,4 | 5978 | 921,5 | 1067 | 165 | NNU 49/500 K/SPW33X |
| 600 | 800 | 200 | 3508,4 | 9996 | 776 | 873 | 280 | NNU 49/600 SPW33X |
| | 800 | 200 | 3508,4 | 9996 | 776 | 873 | 280 | NNU 49/600 K/SPW33X |
| 670 | 900 | 230 | 4851 | 13426 | 679 | 776 | 410 | NNU 49/670 SPW33X |
| | 900 | 230 | 4851 | 13426 | 679 | 776 | 410 | NNU 49/670 K/SPW33X |

CUSCINETTI A RULLI CLINDRICI, A QUATTRO CORONE
CYLINDRICAL ROLLER BEARINGS, FOUR-ROW

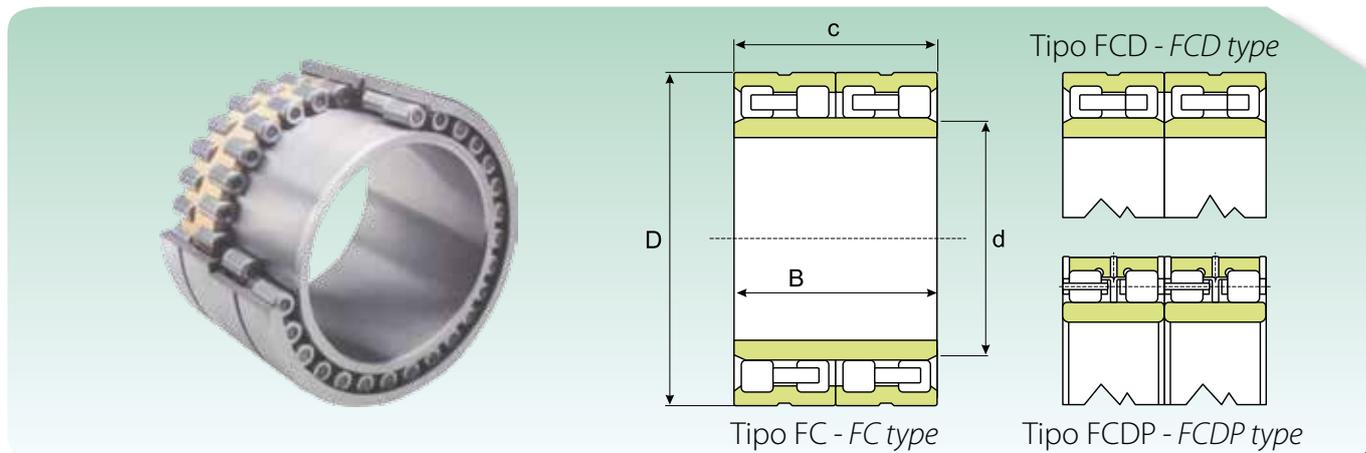


| Dimensioni (mm) Dimension (mm) | | | | Coefficiente di carico (KN) Load rating (KN) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|--------|--------|--------|---|-------------------------------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | c (mm) | Dinamico Dynamic C | Statico Static C ₀ | | |
| 90 | 140 | 70 | 70 | 253 | 425 | 3.78 | FC 182870 |
| 100 | 140 | 70 | 70 | 209 | 435 | 3.10 | FC 202870 |
| | 140 | 104 | 104 | 330 | 775 | 4.99 | FC 2028104 |
| | 150 | 106 | 106 | 425 | 890 | 6.67 | FC 2030106 |
| 110 | 170 | 120 | 120 | 534 | 1110 | 10.1 | FC 2234120 |
| 120 | 180 | 105 | 105 | 413 | 770 | 9.13 | FC 2436105 |
| 130 | 200 | 125 | 125 | 583 | 1200 | 14.6 | FC 2640125 |
| 140 | 210 | 125 | 125 | 594 | 1160 | 14.7 | FC 2842125 |
| 145 | 210 | 155 | 155 | 751 | 1610 | 18.3 | FC 2942155 |
| 150 | 225 | 120 | 120 | 710 | 1450 | 16.7 | FC 3045120 |
| | 225 | 120 | 120 | 710 | 1450 | 16.6 | FCD 3045120 |
| | 230 | 156 | 156 | 852 | 1790 | 23.6 | FC 3046156 |
| 160 | 230 | 130 | 130 | 742 | 1705 | 16.9 | FC 3246130 |
| | 240 | 124 | 124 | 810 | 1530 | 20.3 | FC 3248124 |
| | 240 | 168 | 168 | 1060 | 2350 | 26.4 | FC 3248168 |
| 170 | 230 | 160 | 160 | 1210 | 2360 | 20.0 | FCD 3446160 |
| | 250 | 170 | 170 | 1280 | 2500 | 28.5 | FC 3450170 |
| | 260 | 120 | 120 | 867 | 1790 | 24.6 | FC 3452120 |
| | 260 | 150 | 150 | 1000 | 2240 | 29.7 | FC 3452150 |
| 180 | 260 | 124 | 124 | 809 | 1730 | 21.7 | FC 3652124 |
| | 260 | 168 | 168 | 1180 | 2790 | 30.2 | FC 3652168 |
| | 260 | 180 | 180 | 1250 | 3000 | 31.1 | FC 3652180 |
| 190 | 270 | 168 | 168 | 1420 | 2430 | 30.2 | FC 3854168 |
| | 270 | 170 | 170 | 1430 | 2430 | 30.2 | FC 3854170 |
| | 270 | 200 | 200 | 1520 | 3180 | 35.0 | FC 3854200 |
| 200 | 270 | 170 | 170 | 1120 | 2270 | 28.7 | FC 4054170 |
| | 280 | 188 | 188 | 1430 | 2580 | 35.7 | FC 4056188 |
| | 290 | 192 | 192 | 1460 | 3250 | 40.9 | FC 4058192 |
| 210 | 300 | 170 | 170 | 1320 | 3150 | 39.1 | FC 4260170 |
| | 300 | 210 | 210 | 1560 | 3950 | 48.3 | FC 4260210 |
| 220 | 310 | 192 | 192 | 1600 | 1910 | 45.8 | FC 4462192 |
| | 310 | 225 | 225 | 1850 | 4050 | 53.9 | FC 4462225 |
| | 320 | 210 | 210 | 1900 | 4000 | 57.1 | FCD 4464210 |
| 230 | 330 | 206 | 206 | 1880 | 4350 | 57.8 | FC 4666206 |
| | 340 | 260 | 260 | 2120 | 5350 | 82.1 | FC 4668260 |
| 240 | 330 | 220 | 220 | 1780 | 4850 | 56.7 | FC 4866220 |
| | 360 | 200 | 200 | 1870 | 4410 | 78.0 | FC 4872220 |
| 250 | 350 | 220 | 220 | 1740 | 4980 | 65.5 | FC 5070220 |

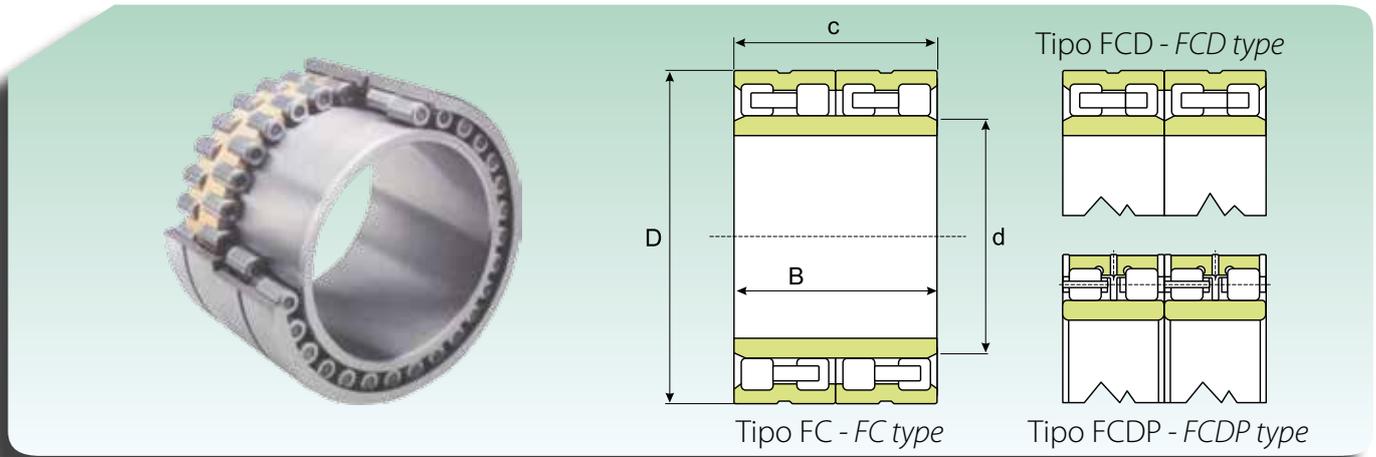
**CUSCINETTI A RULLI CLINDRICI, A QUATTRO CORONE
CYLINDRICAL ROLLER BEARINGS, FOUR-ROW**


| Dimensioni (mm) Dimension (mm) | | | | Coefficiente di carico (KN) Load rating (KN) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|-----------|---|-------------------------------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | c (mm) | Dinamico Dynamic C | Statico Static C ₀ | | |
| 260 | 370 | 200 | 200 | 2050 | 4250 | 73.0 | FC 5274200 |
| | 370 | 220 | 220 | 2100 | 4900 | 80.0 | FC 5274220 |
| | 370 | 220 | 220 | 2100 | 4800 | 78.7 | FC 5274220A |
| | 400 | 145 | 145 | 1800 | 1720 | 136 | FCD 5280290 |
| 270 | 380 | 230 | 230 | 1890 | 4800 | 80.2 | FC 5476230 |
| 280 | 390 | 220 | 220 | 2130 | 5150 | 86.5 | FC 5678220 |
| | 390 | 240 | 240 | 2570 | 5850 | 90.4 | FC 5678240 |
| | 420 | 280 | 280 | 3500 | 7000 | 139 | FC 5684280 |
| 300 | 420 | 240 | 240 | 3450 | 6300 | 111 | FC 6084240 |
| | 420 | 300 | 300 | 3550 | 6800 | 129 | FCD 6084300 |
| 320 | 450 | 240 | 240 | 2760 | 6720 | 119 | FC 6490240 |
| | 460 | 340 | 340 | 3700 | 10000 | 189 | FCD 6492340 |
| 330 | 460 | 340 | 340 | 3550 | 9950 | 210 | FCD 6692340 |
| 340 | 450 | 250 | 250 | 2430 | 6800 | 111 | FC 6890250 |
| | 480 | 350 | 350 | 3750 | 10600 | 202 | FCD 6896350 |
| 350 | 500 | 410 | 410 | 5800 | 13500 | 280 | FCDP 70100410 |
| | 520 | 300 | 300 | 4200 | 9000 | 213 | FC 70104300 |
| 360 | 500 | 250 | 250 | 3600 | 7730 | 156 | FC 72100250 |
| | 510 | 370 | 370 | 4950 | 11400 | 220 | FCD 72102370 |
| 365 | 540 | 300 | 300 | 5000 | 11000 | 490 | FC 73108300 |
| 370 | 520 | 380 | 380 | 5230 | 12000 | 296 | FCDP 74104380 |
| 380 | 540 | 260 | 260 | 3350 | 8550 | 198 | FCD 76108260 |
| | 540 | 300 | 300 | 4650 | 10100 | 220 | FCD 76108300 |
| | 540 | 304 | 304 | 4650 | 10100 | 227 | FC 76108304 |
| | 540 | 340 | 340 | 5240 | 11900 | 256 | FC 76108340 |
| | 540 | 400 | 400 | 5050 | 14200 | 297 | FCD 76108400 |
| | 560 | 300 | 300 | 4950 | 9650 | 261 | FCD 76112300 |
| | 560 | 325 | 325 | 4840 | 10000 | 263 | FCD 76112325 |
| 390 | 540 | 320 | 320 | 5200 | 12000 | 228 | FCD 78108320 |
| 400 | 550 | 300 | 300 | 4460 | 5050 | 223 | FC 80110300 |
| | 560 | 300 | 300 | 4550 | 10000 | 242 | FC 80112300 |
| | 560 | 410 | 410 | 6250 | 15600 | 310 | FCD 80112410 |
| | 590 | 440 | 440 | 7250 | 1650 | 530 | FCD 80114440 |
| 410 | 560 | 400 | 400 | 6400 | 15800 | 287 | FCDP 82112400 |
| | 600 | 440 | 440 | 6450 | 18300 | 445 | FCDP 82120440 |
| 420 | 580 | 260 | 260 | 4350 | 9600 | 205 | FCD 84116260 |
| | 580 | 320 | 320 | 4680 | 10800 | 249 | FCD 84116320 |
| | 600 | 440 | 440 | 5550 | 16300 | 414 | FCD 84120440 |
| 440 | 620 | 450 | 450 | 7420 | 15800 | 452 | FCDP 88124450 |
| | 650 | 355 | 355 | 6250 | 14600 | 400 | FC 88130355 |
| | 660 | 340 | 340 | 6380 | 13500 | 425 | FC 88132340 |

CUSCINETTI A RULLI CLINDRICI, A QUATTRO CORONE
CYLINDRICAL ROLLER BEARINGS, FOUR-ROW

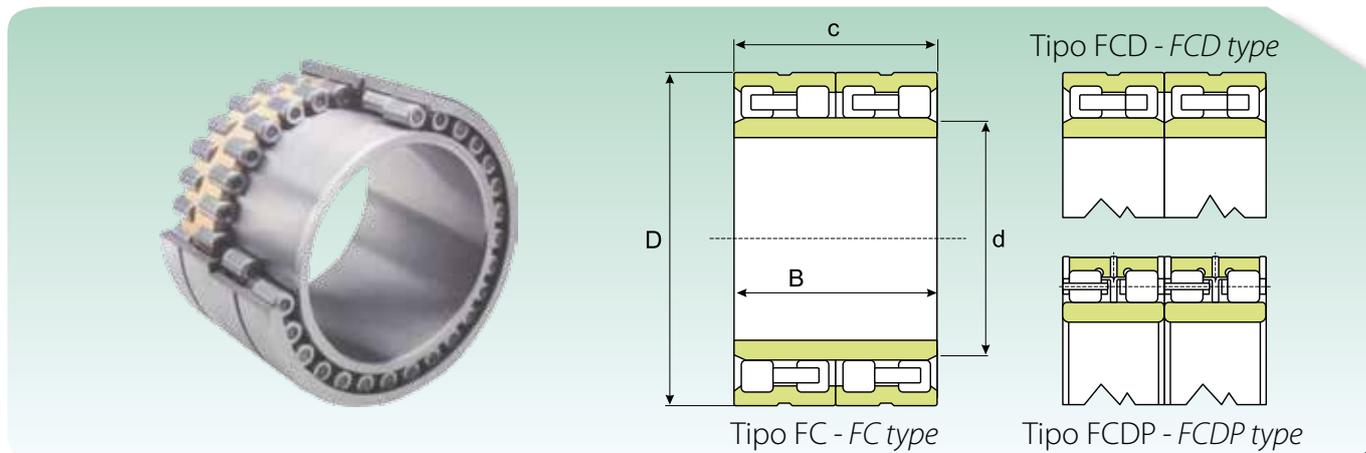


| Dimensioni (mm) Dimension (mm) | | | | Coefficiente di carico (KN) Load rating (KN) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|-----------|---|-------------------------------------|--------------------------|----------------------|
| d (mm) | D (mm) | B (mm) | c (mm) | Dinamico Dynamic C | Statico Static C ₀ | | |
| 450 | 590 | 300 | 300 | 3900 | 12200 | 240 | FC 90114300 |
| 460 | 650 | 355 | 355 | 6250 | 14500 | 375 | FCD 92130355 |
| | 650 | 424 | 424 | 7800 | 18200 | 452 | FCD 92130424 |
| | 650 | 470 | 470 | 8750 | 22400 | 512 | FCD 92130470 |
| | 680 | 400 | 400 | 8050 | 17400 | 630 | FC 92136400 |
| 480 | 650 | 450 | 450 | 7840 | 15400 | 419 | FCD 96130450 |
| | 680 | 420 | 420 | 8400 | 19400 | 510 | FCD 96136420 |
| | 680 | 500 | 500 | 7980 | 23400 | 599 | FCDP 96136500 |
| 500 | 650 | 260 | 260 | 4000 | 10000 | 220 | FCD 100130260 |
| | 670 | 450 | 450 | 8000 | 21500 | 455 | FCD 100132450 |
| | 680 | 450 | 450 | 8200 | 22000 | 485 | FCD 100136450 |
| | 710 | 480 | 480 | 8780 | 21500 | 604 | FCDP 100142480 |
| | 720 | 400 | 400 | 7850 | 17500 | 526 | FC 100144400 |
| | 738 | 500 | 500 | 10500 | 23000 | 732 | FCD 100148500 |
| 510 | 680 | 500 | 500 | 8950 | 26200 | 525 | FCDP 102136500 |
| | 730 | 520 | 520 | 9480 | 21500 | 744 | FCD 102146520 |
| | 760 | 550 | 550 | 12000 | 26500 | 947 | FCDP 102152550 |
| 530 | 760 | 520 | 520 | 11500 | 28500 | 773 | FCDP 106152520 |
| | 780 | 500 | 500 | 9300 | 20500 | 810 | FCD 106156500 |
| | 780 | 570 | 570 | 12700 | 32500 | 954 | FCD 106156570 |
| 550 | 740 | 510 | 510 | 10000 | 27500 | 612 | FCDP 110148510 |
| | 800 | 520 | 520 | 10300 | 28500 | 890 | FCDP 110160520 |
| 560 | 800 | 600 | 600 | 13000 | 33500 | 1010 | FCDP 112160600 |
| | 820 | 315 | 279 | 13500 | 36000 | 1164 | FCDP 112164630 |
| | 820 | 600 | 600 | 14200 | 34000 | 1075 | FCDP 112164600 |
| | 820 | 630 | 630 | 14400 | 36000 | 1170 | FCDP 112164630H |
| 570 | 750 | 530 | 530 | 9000 | 26600 | 625 | FC 114150530 |
| | 800 | 514 | 514 | 11000 | 29000 | 835 | FCDP 114160514 |
| | 815 | 594 | 594 | 13000 | 35200 | 1010 | FCDP 114163594 |
| 580 | 780 | 520 | 486 | 9900 | 27000 | 696 | FCDP 116156486 |
| | 780 | 521 | 486 | 9900 | 27000 | 700 | FCDP 116156486 |
| | 780 | 558 | 486 | 9900 | 27000 | 713 | FCDP 116156486 |
| 590 | 820 | 590 | 590 | 12800 | 35100 | 990 | FCDP 118164590 |
| 600 | 820 | 575 | 575 | 12300 | 35000 | 945 | FCDP 120164575 |
| | 870 | 540 | 540 | 13000 | 31500 | 1100 | FCDP 120174540 |
| | 870 | 640 | 640 | 13200 | 38500 | 1347 | FCDP 120174640 |
| 630 | 800 | 360 | 360 | 6850 | 19500 | 560 | FCD 126160360 |
| | 850 | 436 | 436 | 7450 | 23500 | 720 | FCD 126170436 |
| | 920 | 515 | 515 | 13700 | 17160 | 1182 | FCD 126184515 |
| 640 | 880 | 600 | 600 | 13500 | 40000 | 1120 | FCDP 128176600 |
| 650 | 900 | 650 | 650 | 14000 | 42000 | 1275 | FCDP 130180650 |
| | 920 | 670 | 670 | 14300 | 44500 | 1460 | FCDP 130184670 |
| | 920 | 690 | 690 | 14500 | 45000 | 1490 | FCDP 130184690 |

**CUSCINETTI A RULLI CLINDRICI, A QUATTRO CORONE
CYLINDRICAL ROLLER BEARINGS, FOUR-ROW**


| Dimensioni (mm) Dimension (mm) | | | | Coefficiente di carico (KN) Load rating (KN) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|-----------|---|-------------------------------------|--------------------------|-----------------------|
| d (mm) | D (mm) | B (mm) | c (mm) | Dinamico Dynamic C | Statico Static C ₀ | | |
| 660 | 820 | 440 | 440 | 7450 | 22700 | 532 | FCD 132164440 |
| | 880 | 450 | 450 | 7500 | 23500 | 782 | FCD 132176450 |
| 680 | 1020 | 680 | 680 | 20000 | 49500 | 2050 | FCDP 136204680 |
| 690 | 980 | 715 | 715 | 18800 | 51500 | 1805 | FCDP 138196715 |
| | 980 | 750 | 750 | 18800 | 51500 | 1920 | FCDP 138196750 |
| 700 | 930 | 620 | 620 | 15000 | 42800 | 1170 | FCDP 140186620 |
| | 980 | 700 | 700 | 17500 | 48500 | 1680 | FCDP 140196700 |
| | 1000 | 710 | 710 | 19000 | 47500 | 1820 | FCDP 140200710 |
| 710 | 1020 | 710 | 710 | 19500 | 49700 | 1940 | FCDP 142204710 |
| 725 | 1000 | 700 | 700 | 18000 | 49500 | 1750 | FCDP 145200700 |
| 730 | 960 | 620 | 620 | 15400 | 45000 | 1218 | FCDP 146192620 |
| | 1030 | 750 | 750 | 20500 | 58500 | 2035 | FCDP 146206750 |
| 750 | 1000 | 670 | 670 | 17000 | 48500 | 1522 | FCDP 150200670 |
| | 1080 | 665 | 650 | 19500 | 48000 | 2020 | FCDP 150216650 |
| | 1090 | 750 | 750 | 21500 | 51500 | 2410 | FCDP 150218750 |
| | 1133 | 670 | 670 | 21000 | 50500 | 2450 | FCDP 150226670 |
| 760 | 1015 | 700 | 700 | 18500 | 55000 | 1600 | FCDP 152203700 |
| | 1030 | 750 | 750 | 21000 | 61200 | 1870 | FCDP 152206750 |
| | 1080 | 790 | 790 | 23500 | 65000 | 2420 | FCDP 152216790 |
| | 1080 | 805 | 790 | 23500 | 65000 | 2450 | FCDP 152216790 |
| 780 | 1070 | 780 | 780 | 22000 | 60000 | 2280 | FCDP 156214780 |
| 800 | 1080 | 700 | 700 | 18800 | 48500 | 1850 | FCDP 160216700 |
| | 1080 | 750 | 750 | 20000 | 60000 | 2030 | FCDP 160216750 |
| 820 | 1130 | 800 | 800 | 19700 | 67000 | 2534 | FCDP 164226800 |
| | 1160 | 840 | 840 | 21600 | 68500 | 2750 | FCDP 164232840 |
| 840 | 1160 | 840 | 840 | 24700 | 70800 | 2730 | FCDP 168232840 |
| 850 | 1150 | 840 | 840 | 25400 | 76500 | 2560 | FCDP 170230840 |
| | 1180 | 650 | 650 | 19000 | 50500 | 2100 | FCDP 170236650 |
| | 1180 | 850 | 850 | 26100 | 74000 | 2920 | FCDP 170236850 |
| | 1180 | 875 | 850 | 26100 | 74000 | 2650 | FCDP 170236850 |
| 860 | 1140 | 750 | 750 | 20500 | 61000 | 2100 | FCDP 172228750 |
| | 1160 | 735 | 710 | 21000 | 60000 | 2150 | FCDP 172232710 |
| 880 | 1140 | 80 | 800 | 24000 | 76000 | 2210 | FCDP 176228800 |
| 900 | 1220 | 840 | 840 | 26300 | 80000 | 3050 | FCDP 180244840 |
| | 1280 | 780 | 780 | 28500 | 80500 | 3250 | FCDP 180256780 |
| | 1280 | 930 | 930 | 32500 | 93500 | 4050 | FCDP 180256930 |
| | 1280 | 1050 | 840 | 28900 | 80500 | 3890 | FCDP 180256840 |
| 920 | 1280 | 815 | 800 | 28700 | 80000 | 3280 | FCDP 184256800 |
| | 1280 | 865 | 850 | 27600 | 77500 | 3450 | FCDP 184256850 |
| | 1300 | 975 | 950 | 32500 | 92500 | 4180 | FCDP 184268950 |

CUSCINETTI A RULLI CLINDRICI, A QUATTRO CORONE
CYLINDRICAL ROLLER BEARINGS, FOUR-ROW



| Dimensioni (mm) Dimension (mm) | | | | Coefficiente di carico (KN) Load rating (KN) | | Peso (Kg) Weight (Kg) | Sigla Designation |
|-----------------------------------|-----------|-----------|-----------|---|-------------------------------------|--------------------------|------------------------|
| d (mm) | D (mm) | B (mm) | c (mm) | Dinamico Dynamic C | Statico Static C ₀ | | |
| 950 | 1300 | 850 | 850 | 32200 | 85000 | 3390 | FCDP 190260850 |
| | 1360 | 975 | 975 | 34000 | 100000 | 4895 | FCDP 190272975 |
| | 1360 | 1000 | 1000 | 37500 | 105000 | 5013 | FCDP 1902721000 |
| 980 | 1310 | 880 | 800 | 28500 | 86500 | 3300 | FCDP 196262880 |
| 1000 | 1360 | 800 | 800 | 27000 | 82800 | 3560 | FCDP 200272800 |
| 1030 | 1380 | 850 | 850 | 29000 | 90500 | 3650 | FCDP 206276850 |
| 1040 | 1440 | 1000 | 1000 | 37900 | 93500 | 5090 | FCDP 2082881000 |
| 1200 | 1590 | 1050 | 1050 | 41800 | 13500 | 5980 | FCDP 2403181050 |
| 1300 | 1655 | 890 | 880 | 37300 | 122000 | 4800 | FCDP 260331880 |
| 1350 | 1765 | 1360 | 1360 | 40000 | 122000 | 9110 | FCDP 2703531360 |
| 1400 | 1780 | 1200 | 1200 | 52300 | 163000 | 7380 | FCDP 2703561200 |
| | 1900 | 1360 | 1360 | 61500 | 182000 | 11300 | FCDP 2703801360 |