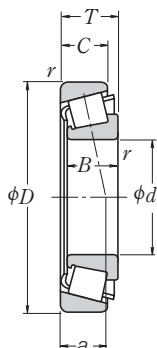


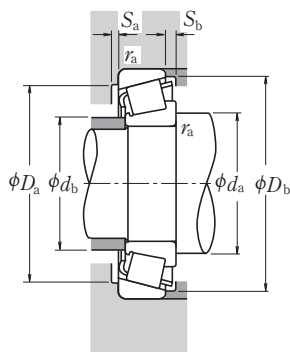
ОДНОРЯДНЫЕ КОНИЧЕСКИЕ РОЛИКОПОДШИПНИКИ

Внутренний диаметр 15 – 28 мм



| d | Габаритные размеры (мм) | | | | | Номинальная грузоподъемность (Н) {кгс} | | | | Предельные скорости (обор/мин) | | |
|----|-------------------------|-------|----|------|--------------------|--|-----------------|----------------|-----------------|--------------------------------|--------|--------|
| | D | T | B | C | вн.к. нар.к. r мин | C _r | C _{0r} | C _r | C _{0r} | Смазка | Масло | |
| 15 | 35 | 11.75 | 11 | 10 | 0.6 | 0.6 | 14 800 | 13 200 | 1 510 | 1 350 | 11 000 | 15 000 |
| | 42 | 14.25 | 13 | 11 | 1 | 1 | 23 600 | 21 100 | 2 400 | 2 160 | 9 500 | 13 000 |
| 17 | 40 | 13.25 | 12 | 11 | 1 | 1 | 20 100 | 19 900 | 2 050 | 2 030 | 9 500 | 13 000 |
| | 40 | 17.25 | 16 | 14 | 1 | 1 | 27 100 | 28 000 | 2 770 | 2 860 | 9 500 | 13 000 |
| 20 | 47 | 15.25 | 14 | 12 | 1 | 1 | 29 200 | 26 700 | 2 980 | 2 720 | 8 500 | 12 000 |
| | 47 | 15.25 | 14 | 10.5 | 1 | 1 | 22 000 | 20 300 | 2 240 | 2 070 | 8 000 | 11 000 |
| | 47 | 20.25 | 19 | 16 | 1 | 1 | 37 500 | 36 500 | 3 800 | 3 750 | 8 500 | 11 000 |
| | 42 | 15 | 15 | 12 | 0.6 | 0.6 | 24 600 | 27 400 | 2 510 | 2 800 | 9 000 | 12 000 |
| | 47 | 15.25 | 14 | 12 | 1 | 1 | 27 900 | 28 500 | 2 850 | 2 900 | 8 000 | 11 000 |
| 22 | 47 | 15.25 | 14 | 12 | 0.3 | 1 | 23 900 | 24 000 | 2 430 | 2 450 | 8 000 | 11 000 |
| | 47 | 19.25 | 18 | 15 | 1 | 1 | 35 500 | 37 500 | 3 650 | 3 850 | 8 500 | 11 000 |
| | 47 | 19.25 | 18 | 15 | 1 | 1 | 31 500 | 33 500 | 3 200 | 3 400 | 8 000 | 11 000 |
| | 52 | 16.25 | 15 | 13 | 1.5 | 1.5 | 35 000 | 33 500 | 3 550 | 3 400 | 7 500 | 10 000 |
| | 52 | 16.25 | 15 | 12 | 1.5 | 1.5 | 25 300 | 24 500 | 2 580 | 2 490 | 7 100 | 10 000 |
| | 52 | 22.25 | 21 | 18 | 1.5 | 1.5 | 45 500 | 47 500 | 4 650 | 4 850 | 8 000 | 11 000 |
| | 44 | 15 | 15 | 11.5 | 0.6 | 0.6 | 25 600 | 29 400 | 2 610 | 3 000 | 8 500 | 11 000 |
| | 50 | 15.25 | 14 | 12 | 1 | 1 | 29 200 | 30 500 | 2 980 | 3 150 | 7 500 | 10 000 |
| | 50 | 15.25 | 14 | 12 | 1 | 1 | 27 200 | 29 500 | 2 780 | 3 000 | 7 500 | 10 000 |
| | 50 | 19.25 | 18 | 15 | 1 | 1 | 36 500 | 40 500 | 3 750 | 4 100 | 7 500 | 11 000 |
| 25 | 50 | 19.25 | 18 | 15 | 1 | 1 | 33 500 | 39 500 | 3 400 | 4 000 | 7 500 | 10 000 |
| | 56 | 17.25 | 16 | 14 | 1.5 | 1.5 | 37 000 | 36 500 | 3 750 | 3 750 | 7 100 | 9 500 |
| | 56 | 17.25 | 16 | 13 | 1.5 | 1.5 | 34 500 | 34 000 | 3 500 | 3 500 | 6 700 | 9 500 |
| | 47 | 15 | 15 | 11.5 | 0.6 | 0.6 | 27 400 | 33 000 | 2 800 | 3 400 | 8 000 | 11 000 |
| | 47 | 17 | 17 | 14 | 0.6 | 0.6 | 31 000 | 38 000 | 3 150 | 3 900 | 8 000 | 11 000 |
| | 52 | 16.25 | 15 | 13 | 1 | 1 | 32 000 | 35 000 | 3 300 | 3 550 | 7 100 | 10 000 |
| | 52 | 16.25 | 15 | 12 | 1 | 1 | 28 100 | 31 500 | 2 860 | 3 200 | 9 700 | 9 500 |
| | 52 | 19.25 | 18 | 16 | 1 | 1 | 40 000 | 45 000 | 4 050 | 4 600 | 7 100 | 10 000 |
| | 52 | 19.25 | 18 | 15 | 1 | 1 | 35 000 | 42 000 | 3 550 | 4 250 | 7 100 | 9 500 |
| | 62 | 18.25 | 17 | 15 | 1.5 | 1.5 | 47 500 | 56 500 | 4 850 | 5 750 | 7 500 | 10 000 |
| 28 | 62 | 18.25 | 17 | 14 | 1.5 | 1.5 | 42 000 | 45 000 | 4 300 | 4 550 | 6 300 | 8 500 |
| | 62 | 18.25 | 17 | 13 | 1.5 | 1.5 | 38 000 | 40 500 | 3 900 | 4 100 | 5 600 | 8 000 |
| | 62 | 18.25 | 17 | 13 | 1.5 | 1.5 | 38 000 | 40 500 | 3 900 | 4 100 | 5 600 | 8 000 |
| | 62 | 25.25 | 24 | 20 | 1.5 | 1.5 | 62 500 | 66 000 | 6 400 | 6 750 | 6 300 | 8 500 |
| | 52 | 16 | 16 | 12 | 1 | 1 | 32 000 | 39 000 | 3 300 | 3 950 | 7 100 | 9 500 |
| | 58 | 17.25 | 16 | 14 | 1 | 1 | 39 500 | 41 500 | 4 050 | 4 200 | 6 300 | 9 000 |
| | 58 | 17.25 | 16 | 12 | 1 | 1 | 34 000 | 38 500 | 3 450 | 3 900 | 6 300 | 8 500 |
| | 58 | 20.25 | 19 | 16 | 1 | 1 | 47 500 | 54 000 | 4 850 | 5 500 | 6 300 | 9 000 |
| 68 | 20.25 | 19 | 16 | 1 | 1 | 42 000 | 49 500 | 4 300 | 5 050 | 6 300 | 9 000 | |
| | 19.75 | 18 | 15 | 1.5 | 1.5 | 55 000 | 55 500 | 5 650 | 5 650 | 6 000 | 8 000 | |
| 68 | 19.75 | 18 | 14 | 1.5 | 1.5 | 49 500 | 50 500 | 5 000 | 5 150 | 5 600 | 7 500 | |

Примечание Суффикс С обозначает конические роликоподшипники со средним углом. Так как такие подшипники производятся для специальных условий применения, в случае их использования, пожалуйста, проконсультируйтесь у специалистов NSK.



Динамическая эквивалентная нагрузка

$$P = X F_r + Y F_a$$

| $F_a/F_r \leq e$ | | $F_a/F_r > e$ | |
|------------------|---|---------------|-------|
| X | Y | X | Y |
| 1 | 0 | 0.4 | Y_1 |

Статическая эквивалентная нагрузка

$$P_0 = 0.5 F_r + Y_0 F_a$$

При $F_r > 0.5 F_r + Y_0 F_a$, используйте $P_0 = F_r$

Величины e , Y_1 и Y_0 указаны в таблице ниже.

| Обозначения подшипников | Размерная серия по ISO355 Приблизит. | Размеры заплечиков вала и корпуса (мм) | | | | | | | | | Центры полезной нагрузки (мм) a | Константа e | Коэффициенты осевой нагрузки | | Масса (кг) Прибл. |
|-------------------------|--------------------------------------|--|------------|------------|-----------|-----------|-----------|-------|--------|------------|-----------------------------------|---------------|------------------------------|-------|-------------------|
| | | d_a мин | d_b макс | D_a макс | D_b мин | S_a мин | S_b мин | вн.к. | нар.к. | r_a макс | | | Y_1 | Y_0 | |
| 30202 | — | 23 | 19 | 30 | 30 | 33 | 2 | 1.5 | 0.6 | 0.6 | 8.2 | 0.32 | 1.9 | 1.0 | 0.053 |
| HR 30302 J | 2FB | 24 | 22 | 36 | 36 | 38.5 | 2 | 3 | 1 | 1 | 9.5 | 0.29 | 2.1 | 1.2 | 0.098 |
| HR 30203 J | 2DB | 26 | 23 | 34 | 34 | 37.5 | 2 | 2 | 1 | 1 | 9.7 | 0.35 | 1.7 | 0.96 | 0.079 |
| HR 32203 J | 2DD | 26 | 22 | 34 | 34 | 37 | 2 | 3 | 1 | 1 | 11.2 | 0.31 | 1.9 | 1.1 | 0.103 |
| HR 30303 J | 2FB | 26 | 24 | 41 | 40 | 43 | 2 | 3 | 1 | 1 | 10.4 | 0.29 | 2.1 | 1.2 | 0.134 |
| 30303 D | — | 29 | 23 | 41 | 34 | 44 | 2 | 4.5 | 1 | 1 | 15.4 | 0.81 | 0.74 | 0.41 | 0.129 |
| HR 32303 J | 2FD | 28 | 23 | 41 | 39 | 43 | 2 | 4 | 1 | 1 | 12.5 | 0.29 | 2.1 | 1.2 | 0.178 |
| HR 32004 XJ | 3CC | 28 | 24 | 37 | 35 | 40 | 3 | 3 | 0.6 | 0.6 | 10.6 | 0.37 | 1.6 | 0.88 | 0.097 |
| HR 30204 J | 2DB | 29 | 27 | 41 | 40 | 44 | 2 | 3 | 1 | 1 | 11.0 | 0.35 | 1.7 | 0.96 | 0.127 |
| HR 30204 C-A- | — | 29 | 26 | 41 | 37 | 44 | 2 | 3 | 0.3 | 1 | 13.0 | 0.55 | 1.1 | 0.60 | 0.126 |
| HR 32204 J | 2DD | 29 | 25 | 41 | 38 | 44.5 | 3 | 4 | 1 | 1 | 12.6 | 0.33 | 1.8 | 1.0 | 0.161 |
| HR 32204 CJ | 5DD | 29 | 25 | 41 | 36 | 44 | 2 | 4 | 1 | 1 | 14.5 | 0.52 | 1.2 | 0.64 | 0.166 |
| HR 30304 J | 2FB | 31 | 27 | 44 | 44 | 47.5 | 2 | 3 | 1.5 | 1.5 | 11.6 | 0.30 | 2.0 | 1.1 | 0.172 |
| 30304 D | — | 34 | 26 | 43 | 37 | 49 | 2 | 4 | 1.5 | 1.5 | 16.7 | 0.81 | 0.74 | 0.41 | 0.168 |
| HR 32304 J | 2FD | 33 | 26 | 43 | 42 | 48 | 3 | 4 | 1.5 | 1.5 | 13.9 | 0.30 | 2.0 | 1.1 | 0.241 |
| HR 320/22 XJ | 3CC | 30 | 27 | 39 | 37 | 42 | 3 | 3.5 | 0.6 | 0.6 | 11.1 | 0.40 | 1.5 | 0.83 | 0.103 |
| HR 302/22 | — | 31 | 29 | 44 | 42 | 47 | 2 | 3 | 1 | 1 | 11.6 | 0.37 | 1.6 | 0.90 | 0.139 |
| HR 302/22 C | — | 31 | 29 | 44 | 40 | 47 | 2 | 3 | 1 | 1 | 13.0 | 0.49 | 1.2 | 0.67 | 0.144 |
| HR 322/22 | — | 31 | 28 | 44 | 41 | 47 | 2 | 4 | 1 | 1 | 13.5 | 0.37 | 1.6 | 0.89 | 0.18 |
| HR 322/22 C | — | 31 | 29 | 44 | 39 | 48 | 2 | 4 | 1 | 1 | 15.2 | 0.51 | 1.2 | 0.65 | 0.185 |
| HR 303/22 | — | 33 | 30 | 47 | 46 | 50 | 2 | 3 | 1.5 | 1.5 | 12.4 | 0.32 | 1.9 | 1.0 | 0.208 |
| HR 303/22 C | — | 33 | 30 | 47 | 44 | 52.5 | 3 | 4 | 1.5 | 1.5 | 15.9 | 0.59 | 1.0 | 0.56 | 0.207 |
| HR 32005 XJ | 4CC | 33 | 30 | 42 | 40 | 45 | 3 | 3.5 | 0.6 | 0.6 | 11.8 | 0.43 | 1.4 | 0.77 | 0.116 |
| HR 33005 J | 2CE | 33 | 29 | 42 | 41 | 44 | 3 | 3 | 0.6 | 0.6 | 11.0 | 0.29 | 2.1 | 1.1 | 0.131 |
| HR 30205 J | 3CC | 34 | 31 | 46 | 44 | 48.5 | 2 | 3 | 1 | 1 | 12.7 | 0.37 | 1.6 | 0.88 | 0.157 |
| HR 30205 C | — | 34 | 32 | 46 | 43 | 49.5 | 2 | 4 | 1 | 1 | 14.4 | 0.53 | 1.1 | 0.62 | 0.155 |
| HR 32205 J | 2CD | 34 | 30 | 46 | 44 | 50 | 2 | 3 | 1 | 1 | 13.5 | 0.36 | 1.7 | 0.92 | 0.189 |
| HR 32205 C | — | 34 | 30 | 46 | 40 | 50 | 2 | 4 | 1 | 1 | 15.8 | 0.53 | 1.1 | 0.62 | 0.19 |
| HR 32305 J | 2DE | 34 | 29 | 46 | 43 | 49.5 | 4 | 4 | 1 | 1 | 14.1 | 0.35 | 1.7 | 0.94 | 0.221 |
| HR 30305 J | 2FB | 36 | 34 | 54 | 54 | 57 | 2 | 3 | 1.5 | 1.5 | 13.2 | 0.30 | 2.0 | 1.1 | 0.27 |
| HR 30305 C | — | 36 | 35 | 53 | 49 | 58.5 | 3 | 4 | 1.5 | 1.5 | 16.4 | 0.55 | 1.1 | 0.60 | 0.276 |
| HR 30305 DJ | (7FB) | 39 | 34 | 53 | 47 | 59 | 2 | 5 | 1.5 | 1.5 | 19.9 | 0.83 | 0.73 | 0.40 | 0.265 |
| HR 31305 J | 7FB | 39 | 33 | 53 | 47 | 59 | 3 | 5 | 1.5 | 1.5 | 19.9 | 0.83 | 0.73 | 0.40 | 0.265 |
| HR 32305 J | 2FD | 38 | 32 | 53 | 51 | 57 | 3 | 5 | 1.5 | 1.5 | 15.6 | 0.30 | 2.0 | 1.1 | 0.376 |
| HR 320/28 XJ | 4CC | 37 | 33 | 46 | 44 | 50 | 3 | 4 | 1 | 1 | 12.8 | 0.43 | 1.4 | 0.77 | 0.146 |
| HR 302/28 | — | 37 | 34 | 52 | 50 | 55 | 2 | 3 | 1 | 1 | 13.2 | 0.35 | 1.7 | 0.93 | 0.203 |
| HR 302/28 C | — | 37 | 34 | 52 | 48 | 54 | 2 | 5 | 1 | 1 | 16.9 | 0.64 | 0.94 | 0.52 | 0.198 |
| HR 322/28 | — | 37 | 34 | 52 | 49 | 55 | 2 | 4 | 1 | 1 | 14.6 | 0.37 | 1.6 | 0.89 | 0.243 |
| HR 322/28 CJ | 5DD | 37 | 33 | 52 | 45 | 55 | 2 | 4 | 1 | 1 | 16.8 | 0.56 | 1.1 | 0.59 | 0.251 |
| HR 303/28 | — | 39 | 37 | 59 | 58 | 61 | 2 | 4.5 | 1.5 | 1.5 | 14.5 | 0.31 | 1.9 | 1.1 | 0.341 |
| HR 303/28 C | — | 39 | 38 | 59 | 57 | 63 | 3 | 5.5 | 1.5 | 1.5 | 17.4 | 0.52 | 1.2 | 0.64 | 0.335 |