

# High Precision bearings

Precision bearings are classified according to ISO's grading standards: P0, P6, P5, P4, P2. Grades increase in sequence, where P0 is the general accuracy, and other grades are precision grades. Of course, different grading standards, different types of bearings, their classification methods are different, but the significance is one to the. The performance of precision bearings requires that the rotating body has high run-out precision, high-speed rotation, and low friction and friction changes.

Precision bearings and plain bearings should be distinguished from the following:

1. The dimensional deviations (inner diameter, outer diameter, ellipse, etc.) of the products with different dimensional accuracy values are higher than that of precision

Precision bearings

Precision bearings (10 photos)

Products with low grades require less value;

2. The requirements for rotational accuracy are not the same. The accuracy of the product with high accuracy grade (internal radial runout, external radial runout, end surface raceway runout, etc.) is more stringent than the value of the product with lower accuracy level;

3. The requirements for surface shape and surface quality are not the same. The surface shape and surface quality (surface roughness, roundness deviation, groove shape deviation, etc.) of products with high accuracy level are lower than the accuracy level. Product requirements must be strict;

4. The material of a product with a particularly high level of accuracy is more favorable than the material of a general accuracy grade.

Under normal circumstances, the precision grade of rolling bearing finished products is divided into the following six levels (from low to high): 0;6;6X;5;4;2.

67883/67820CD 67883 67820CD 184.15 266.7 103.188 TIMKEN  
93708/93127CD 93708 93127CD 179.975 317.5 146.05 TIMKEN  
H239640/H239612CD H239640 H239612CD 177.8 320.675 185.738 TIMKEN  
94700/94118D 94700 94118D 177.8 298.45 142.875 TIMKEN  
HM237545/HM237510CD HM237545 HM237510CD 177.8 288.925 142.875 TIMKEN  
94700/94114CD 94700 94114CD 177.8 288.925 142.875 TIMKEN  
67790/67720CD 67790 67720CD 177.8 247.65 103.188 TIMKEN  
36990/36920CD 36990 36920CD 177.8 227.012 66.672 TIMKEN  
HM136948/HM136916XD HM136948 HM136916XD 177.787 276.225 181.023 TIMKEN  
HM237542/HM237510CD HM237542 HM237510CD 174.625 288.925 142.875 TIMKEN  
94687/94114CD 94687 94114CD 174.625 288.925 142.875 TIMKEN  
67787/67720CD 67787 67720CD 174.625 247.65 103.188 TIMKEN  
67786/67720CD 67786 67720CD 174.625 247.65 103.188 TIMKEN  
M235149/M235113CD M235149 M235113CD 170 254 101.6 TIMKEN  
67782/67720CD 67782 67720CD 168.275 247.65 103.188 TIMKEN  
46792/46720CD 46792 46720CD 166.687 225.425 85.725 TIMKEN  
94649/94118D 94649 94118D 165.1 298.45 142.875 TIMKEN  
HM237536/HM237510CD HM237536 HM237510CD 165.1 288.925 142.875 TIMKEN

HM237535/HM237510CD HM237535 HM237510CD 165.1 288.925 142.875 TIMKEN  
JP14049/JP14010-B JP14049 JP14010-B 140 195 13 TIMKEN  
99550/99100-B 99550 99100-B 139.7 254 30.162 TIMKEN  
HM231132/HM231115-B HM231132 HM231115-B 139.7 241.3 22.225 TIMKEN  
74550/74850-B 74550 74850-B 139.7 215.9 20.638 TIMKEN  
99537/99100-B 99537 99100-B 136.525 254 30.162 TIMKEN  
74537/74850-B 74537 74850-B 136.525 215.9 20.638 TIMKEN  
95525/95925-B 95525 95925-B 133.35 234.95 25.4 TIMKEN  
74525/74850-B 74525 74850-B 133.35 215.9 20.638 TIMKEN  
48385/48320-B 48385 48320-B 133.35 190.5 11.908 TIMKEN  
67389/67322-B 67389 67322-B 130.175 196.85 15.083 TIMKEN  
JP13049/JP13010-B JP13049 JP13010-B 130 185 13 TIMKEN  
95500/95925-B 95500 95925-B 127 234.95 25.4 TIMKEN  
68462/68712-B 68462 68712-B 117.475 180.975 16.667 TIMKEN  
JLM722948/JLM722912-B JLM722948 JLM722912-B 115 165 12.5 TIMKEN  
938/932-B 938 932-B 114.3 212.725 23.812 TIMKEN  
71450/71750-B 71450 71750-B 114.3 190.5 20.638 TIMKEN  
64450/64700-B 64450 64700-B 114.3 177.8 18.258 TIMKEN  
71437/71750-B 71437 71750-B 111.125 190.5 20.638 TIMKEN  
64433/64700-B 64433 64700-B 109.992 177.8 18.258 TIMKEN  
37431/37625-B 37431 37625-B 109.538 158.75 11.908 TIMKEN  
HH224340/HH224310-B HH224340 HH224310-B 107.95 212.725 23.812 TIMKEN  
936/932-B 936 932-B 107.95 212.725 23.812 TIMKEN  
71425/71750-B 71425 71750-B 107.95 190.5 20.638 TIMKEN  
56425/56650-B 56425 56650-B 107.95 165.1 15.875 TIMKEN  
71412/71750-B 71412 71750-B 104.775 190.5 20.638 TIMKEN  
782/772-B 782 772-B 104.775 180.975 17.462 TIMKEN  
941/932-B 941 932-B 101.6 212.725 23.812 TIMKEN  
98400/98788-B 98400 98788-B 101.6 200 27.361 TIMKEN  
HH221449/HH221410-B HH221449 HH221410-B 101.6 190.5 22.225 TIMKEN  
861/854-B 861 854-B 101.6 190.5 22.225 TIMKEN  
780/772-B 780 772-B 101.6 180.975 17.462 TIMKEN  
687/672-B 687 672-B 101.6 168.275 18.255 TIMKEN  
52400/52637-B 52400 52637-B 101.6 161.925 16.667 TIMKEN  
52400/52630XB 52400 52630XB 101.6 160 16.667 TIMKEN  
52400/52618-B 52400 52618-B 101.6 157.162 16.667 TIMKEN  
783/772-B 783 772-B 100 180.975 17.462 TIMKEN  
JP10049/JP10010-B JP10049 JP10010-B 100 145 10.5 TIMKEN  
HH221447/HH221410-B HH221447 HH221410-B 99.982 190.5 22.225 TIMKEN  
HH224332/HH224310-B HH224332 HH224310-B 98.425 212.725 23.812 TIMKEN  
HH221442/HH221410-B HH221442 HH221410-B 98.425 190.5 22.225 TIMKEN  
779/772-B 779 772-B 98.425 180.975 17.462 TIMKEN  
685/672-B 685 672-B 98.425 168.275 18.255 TIMKEN  
52387/52637-B 52387 52637-B 98.425 161.925 16.667 TIMKEN  
42381/42587-B 42381 42587-B 96.838 149.225 12.7 TIMKEN  
HH221440/HH221410-B HH221440 HH221410-B 95.25 190.5 22.225 TIMKEN

864/854-B 864 854-B 95.25 190.5 22.225 TIMKEN  
777/772-B 777 772-B 95.25 180.975 17.462 TIMKEN  
776/772-B 776 772-B 95.25 180.975 17.462 TIMKEN  
77375/77675-B 77375 77675-B 95.25 171.45 17.462 TIMKEN  
683/672-B 683 672-B 95.25 168.275 18.255 TIMKEN  
766/752-B 766 752-B 88.9 161.925 17.45 TIMKEN  
593/592-B 593 592-B 88.9 152.4 15.875 TIMKEN  
42350/42587-B 42350 42587-B 88.9 149.225 12.7 TIMKEN  
596-S/592-B 596-S 592-B 87.312 152.4 15.875 TIMKEN  
841/832-B 841 832-B 85.725 168.275 22.225 TIMKEN  
677/672-B 677 672-B 85.725 168.275 18.255 TIMKEN  
758/752-B 758 752-B 85.725 161.925 17.45 TIMKEN  
665/652-B 665 652-B 85.725 152.4 16.667 TIMKEN  
596/592-B 596 592-B 85.725 152.4 15.875 TIMKEN  
497/493-B 497 493-B 85.725 136.525 13.475 TIMKEN  
JM716649/JM716610-B JM716649 JM716610-B 85 130 11.56 TIMKEN  
498/493-B 498 493-B 84.138 136.525 13.475 TIMKEN  
EE128110/128160 EE128110 128160 280.192 406.4 69.85 TIMKEN  
EE101103/101600 EE101103 101600 280.192 406.4 52.388 TIMKEN  
EE101103/101575 EE101103 101575 280.192 400.05 52.388 TIMKEN  
EE128112/128160 EE128112 128160 280 406.4 69.85 TIMKEN  
LM654642/LM654611 LM654642 LM654611 279.982 380.009 65.088 TIMKEN  
EE295110/295193 EE295110 295193 279.4 488.95 120.65 TIMKEN  
EE722110/722185 EE722110 722185 279.4 469.9 95.25 TIMKEN  
LL352149/LL352110 LL352149 LL352110 279.4 317.5 24.384 TIMKEN  
L853049/L853010 L853049 L853010 276.225 352.425 36.512 TIMKEN  
EE275108/275160 EE275108 275160 273.05 406.4 69.85 TIMKEN  
EE275108/275155 EE275108 275155 273.05 393.7 73.817 TIMKEN  
M252349/M252310 M252349 M252310 269.875 381 74.612 TIMKEN  
H852849/H852810 H852849 H852810 266.7 444.5 120.65 TIMKEN  
EE275105/275160 EE275105 275160 266.7 406.4 69.85 TIMKEN  
EE275105/275155 EE275105 275155 266.7 393.7 73.817 TIMKEN  
LM451349/LM451310 LM451349 LM451310 266.7 355.6 57.15 TIMKEN  
LM451349A/LM451310 LM451349A LM451310 266.7 355.6 57.15 TIMKEN  
38885/38820 38885 38820 266.7 325.438 28.575 TIMKEN  
29880/29820 29880 29820 266.7 323.85 22.225 TIMKEN