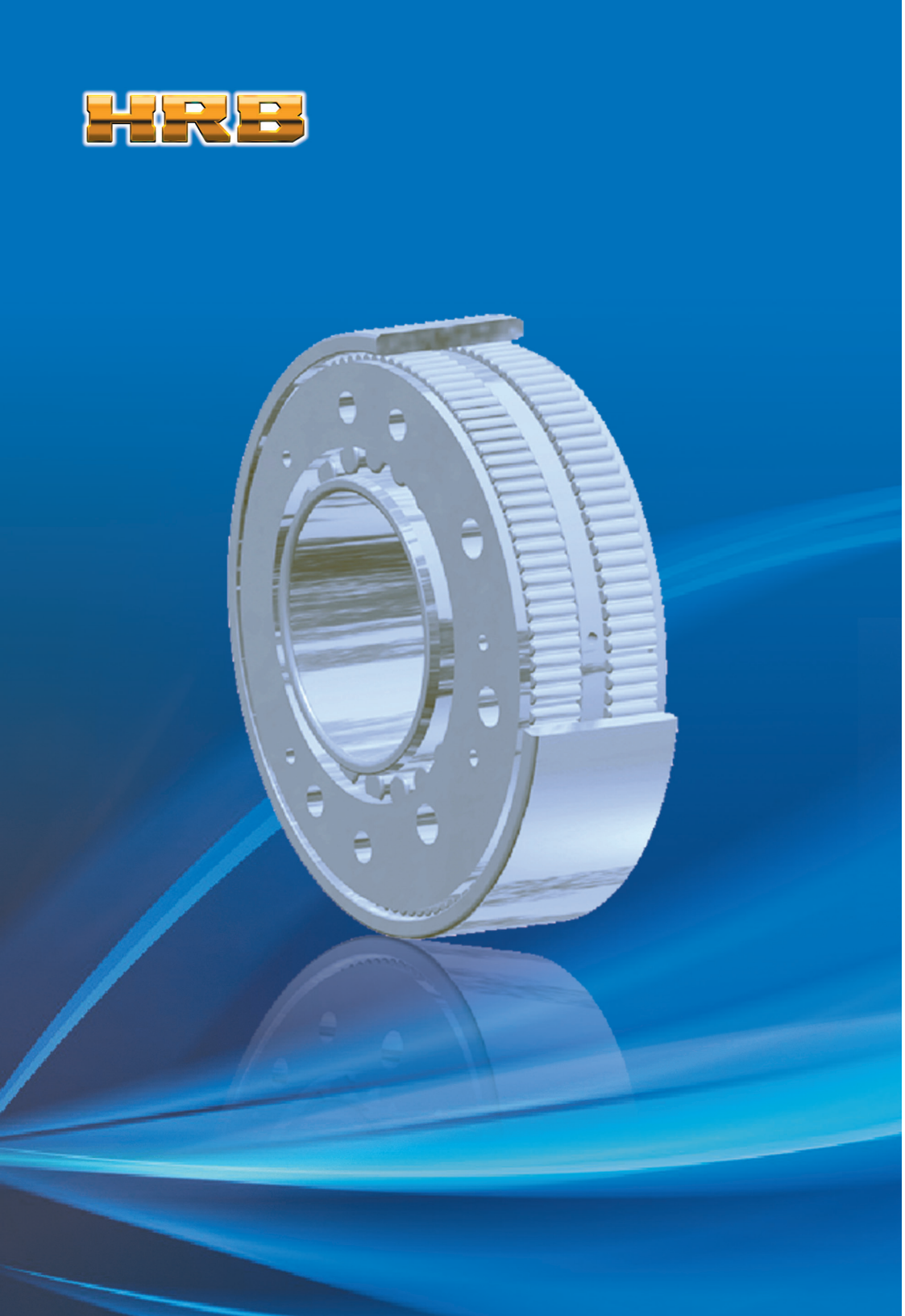


# Printing machine cylinder bearings

# Printing Machine Cylinder Bearings

As a type of ultra–precision rolling bearings, printing machine cylinder bearings are designed with decentralizing device, so as to meet the operation requirements.

**Structural characteristics**

**Structure features of printing machine cylinder bearings**

New–type printing machine cylinder bearing units are composed of multi axially–paired (arranged) ultra–precision rolling bearings, installed radial sleeves, eccentric sleeves, flanges, and other mechanical components. Such bearing units can perform the combined functions of their components and parts, thus leading to the easy installation and performance improvement of printing machine cylinders.

**Types of bearing structures**

(1)in the light of the numbers of layers of the radially–installed bearings: single–layer bearings, double–layer bearings, and three–layer bearings.

(2)in the light of the numbers of eccentric shafts of the bearings: single eccentric–shaft bearings, and double eccentric–shaft bearings.

(3)in the light of bearing types of inner bearing and outer bearing: double row tapered roller bearings & needle bearing combination, double row tapered roller bearings & double row tapered roller bearings combination, double (multi) row cylindrical roller bearings with conical–bore inner rings & double (multi) row cylindrical roller bearings, double (multi) row cylindrical roller bearings with conical–bore inner rings & single or double (multi) needle bearings.

**Precision**

Class P4, and Class P2.

**Clearance**

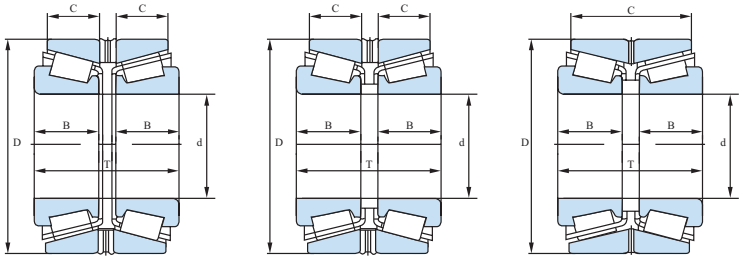
By the adjustment of clearance, double row tapered roller bearings can have optimal precision, and so can perform the combined functions of two kinds of bearings, i.e. cylindrical roller bearings, and thrust bearings. When being installed, the bearings with conical–bore inner rings, by the axial displacement of conical bore, can make radial displacement, in order to have optimal precision.

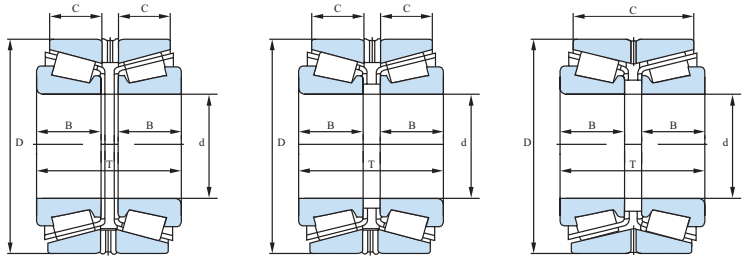
HRB can manufacture the high–precision printing machine cylinder bearings with inner rings of 1：12 or 1：30 conical bores.

Within printing machine, printing machine cylinder bearings are mainly installed on both sides of plate cylinder, of impression cylinder, or of rubber cylinder.

On the basis of the user requirements, HRB can manufacture the printing machine cylinder bearings with other dimensions and structures.

## Printing machine cylinder bearings
Double row tapered

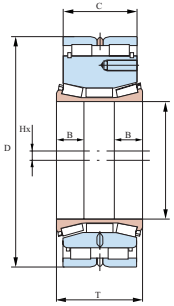


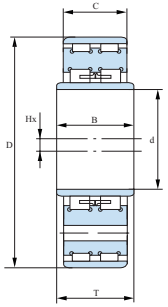

| Designations | Boundary dimensions | | | |
|---|---|---|---|---|
| | d | D | B | C |
| | mm | | | |
| PTD350211X2 | 55 | 100 | 21 | 42.862 |
| 80KBE11 | 80 | 115 | 24 | 41 |
| PTD64450–PTD64700 | 114.3 | 177.8 | 41.275 | 30.162 |
| PTD74525–PTD74850 | 133.35 | 215.9 | 47.625 | 34.925 |
| E32924JS | 120 | 165 | 29 | 56 |
| 32932T90/DBGC010 | 160 | 220 | 38 | 74 |
| PTD352932 | 160 | 220 | 38 | 74 |
| PTD180R18 | 180 | 250 | 45 | 34 |
| PTD32940/DB | 200 | 280 | 51 | 96 |
| PTDM241549–PTDM241510 | 204.788 | 282.1 | 57.945 | 108.076 |

| Boundary dimensions | | Basic load ratings | | Mass (reference) |
|---|---|---|---|---|
| T | Hx | Cr | Cor | |
| mm | | kN | | kg |
| 52.388 | – | 170 | 239 | 1.67 |
| 57 | – | 130 | 259 | 1.68 |
| 91.5 | – | 405 | 767 | 7.4 |
| 110 | – | 55.4 | 1102 | 13.5 |
| 68 | – | 295 | 635 | 4.03 |
| 90 | – | 452 | 1052 | 9.23 |
| 90 | – | 452 | 1052 | 9.47 |
| 106 | – | 471 | 1275 | 14.4 |
| 120 | – | 736 | 1723 | 24.1 |
| 131.89 | – | 918 | 2078 | 24.8 |

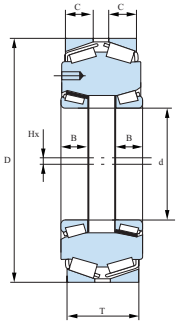
## Printing machine cylinder bearings
Decentralizing combination



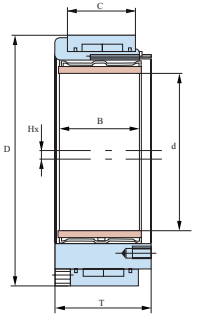

Three rings decentralizing combination




Three rings decentralizing cylinder



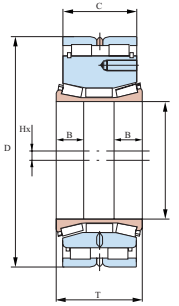

Three rings decentralizing taper



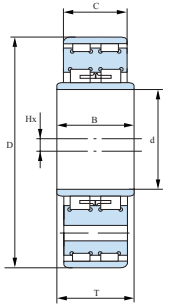

Three rings decentralizing needle

| Designations | Boundary dimensions | | | |
|---|---|---|---|---|
| | d | D | B | C |
| | mm | | | |
| SBX0437–2RS | 19.05 | 42 | 16.7 | 12 |
| PCU62–08K | 62 | 150 | 48 | 42 |
| RAS15 | 80 | 150 | 24 | 45 |
| EA241A | 80 | 140 | 24 | 57 |
| PCU90–06–10 | 90 | 210 | 37 | 46.5 |
| PTU114–07 | 114.3 | 220 | 26 | 23 |
| PTU120–10 | 120 | 235 | 29 | 78 |
| PCU120–06 | 120 | 190 | 65 | 54 |
| PTU140–07 | 140 | 300 | 32 | 39 |

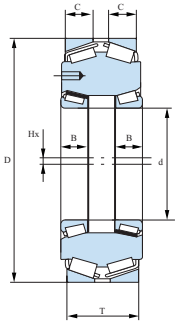




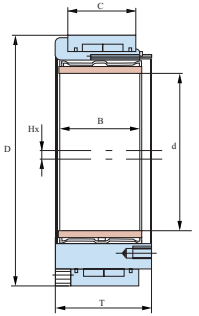

Three rings decentralizing combination




Three rings decentralizing cylinder




Three rings decentralizing taper




Three rings decentralizing needle

| Boundary dimensions | | Basic load ratings | | Mass (reference) |
|---|---|---|---|---|
| T | Hx | Cr | Cor | |
| mm | | kN | | kg |
| 24.5 | 0.45 | 9.38 | 5.05 | 0.12 |
| 48 | 8 | 112 | 172 | 4.19 |
| 57 | 5.5 | 130 | 259 | 4.37 |
| 57 | 5 | 130 | 259 | 3.83 |
| 54 | 16 | 224 | 140 | 6.74 |
| 80 | 7 | 234 | 503 | 12.6 |
| 90 | 10 | 295 | 635 | 16 |
| 76 | 6 | 160 | 581 | 8.3 |
| 110 | 7 | 343 | 749 | 35.7 |