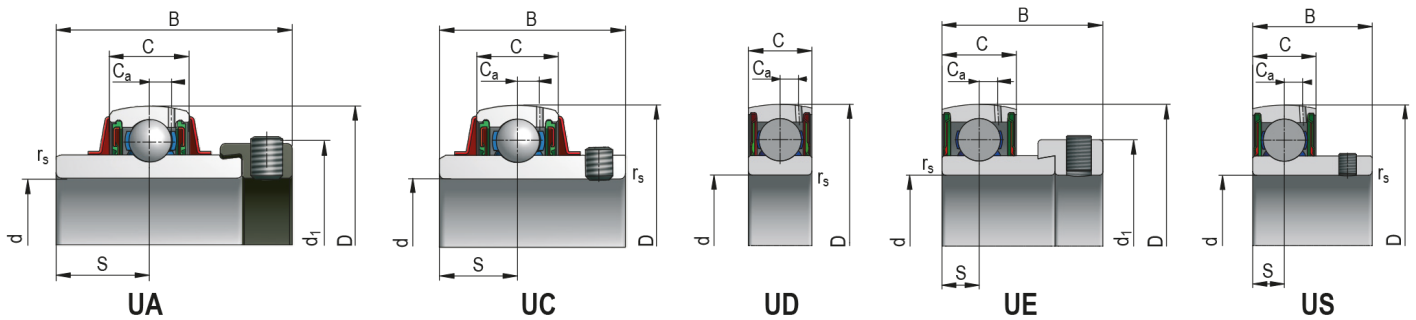


# Insert ball bearings



**Bearing Designation** **UC204R3**

## Dimensions (mm)

|                |    |                    |      |
|----------------|----|--------------------|------|
| d              | 20 | r <sub>s</sub> min | 1,5  |
| D              | 47 | d <sub>1</sub> max | -    |
| B              | 31 | S                  | 12,7 |
| C <sub>s</sub> | 16 | C <sub>a</sub>     | 4,4  |

## Basic Load Rating (kN)

|                |       |
|----------------|-------|
| C              | 12,79 |
| C <sub>0</sub> | 6,58  |

## Radial Clearance C3 (mm)

|     |       |
|-----|-------|
| min | 0,012 |
| max | 0,028 |

**Weight [kg]** 0,160

## Tolerance Symbols and Their Meaning

|                 |  |                |   |
|-----------------|--|----------------|---|
| $d$             | nominal bore diameter  | $H_4$          | rated height of spherical-roller bearing  |
| $d_1$           | nominal diameter of larger theoretical tapered bore diameter   | $\Delta_{Bs}$  | inner ring single width deviation   |
| $d_2$           | nominal diameter of the shaft washer of double direction thrust bearings   | $\Delta_{Cs}$  | outer ring single width deviation   |
| $\Delta_{ds}$   | deviation of single bore diameter from nominal   | $\Delta_{Ts}$  | bearing single width deviation (total)  |
| $\Delta_{dmp}$  | mean cylindrical bore diameter deviation in single radial plane (for tapered bore $\Delta_{dmp}$ is valid for theoretical bore diameter) | $\Delta_{T1s}$ | cone sub-unit effective width deviation   |
| $\Delta_{d1mp}$ | deviation of mean larger theoretical diameter of tapered bore  | $\Delta_{T2s}$ | cup sub-unit effective width deviation  |
| $\Delta_{d2mp}$ | mean shaft washer bore diameter deviation of double direction thrust bearings in single radial plane                                     | $\Delta_{Hs}$  | height deviation of single direction axial bearings from nominal value                                  |
| $V_{dp}$        | single bore diameter variation in single radial plane  | $\Delta_{H1s}$ | height deviation of single direction axial ball bearings with sphered housing washer from nominal value |
| $V_{dmp}$       | mean cylindrical bore diameter variation   | $\Delta_{H2s}$ | height deviation of double direction axial bearings from nominal value                                  |
| $V_{d2p}$       | shaft washer bore diameter variation of double direction thrust bearings in single radial plane  | $\Delta_{H3s}$ | height deviation of double direction axial ball bearings with sphered housing washer from nominal value |
| $D$             | nominal outside diameter   | $\Delta_{H4s}$ | height deviation of axial spherical-roller bearing from the rated value                                 |
| $\Delta_{Ds}$   | deviation of single outside diameter from the nominal dimension  | $C$            | outer ring nominal width  |
| $\Delta_{Dmp}$  | mean outside cylindrical surface diameter deviation in single plane  | $V_{Bs}$       | inner ring single width variation   |
| $V_{Dp}$        | single outside cylindrical surface diameter variation in single radial plane   | $V_{Cs}$       | outer ring single width variation   |
| $V_{Dmp}$       | mean outside cylindrical surface diameter variation  | $K_{ia}$       | radial runout of assembled bearing inner ring   |
| $B$             | inner ring nominal width   | $K_{ea}$       | radial runout of assembled bearing outer ring   |
| $T$             | total nominal width of tapered roller bearings   | $S_i$          | shaft washer raceway axial runout   |
| $T_1$           | nominal effective width of cup sub-unit  | $S_e$          | housing washer raceway axial runout   |
| $T_2$           | nominal effective width of cone sub-unit   | $S_{ia}$       | inner ring flat seat face axial runout of assembled bearing   |
| $H$             | rated width of unidirectional axial bearing  | $S_{ea}$       | outer ring flat seat face axial runout of assembled bearing   |
| $H_1$           | rated height of unidirectional ball axial bearing including the body ring  | $S_d$          | flat seat face axial runout   |
| $H_2$           | rated height of bidirectional axial bearing  | $S_D$          | runout of outside cylindrical surface towards outer ring face   |
| $H_3$           | rated height of bidirectional axial ball bearing including body rings  | $S_s$          | runout of supporting face towards seat face for single row tapered roller bearings                      |