



# PRODUCT DATASHEET

Datasheet creation date: 2025/05/28 10:24 (UTC)



## 22220EAE4

### Spherical Roller Bearings

#### Parts Number

|             |
|-------------|
| 22220EAE4C3 |
|-------------|

#### Boundary Dimensions

|          |     |    |                   |
|----------|-----|----|-------------------|
| d        | 100 | mm | Bore diameter     |
| D        | 180 | mm | Outside diameter  |
| B        | 46  | mm | Width             |
| r (min.) | 2.1 | mm | Chamfer dimension |

#### Basic Load Ratings

|     |        |   |                           |
|-----|--------|---|---------------------------|
| Cr  | 455000 | N | Basic dynamic load rating |
| C0r | 490000 | N | Basic static load rating  |

#### Speeds

|                                     |      |       |                                                                     |
|-------------------------------------|------|-------|---------------------------------------------------------------------|
| Thermal Speed Rating (Oil-bath)     | 3600 | min-1 | Oil-bath lubrication subject to conditions outlined in ISO 15312    |
| Mechanical (forced-circulation oil) | 4300 | min-1 | Properly designed and controlled forced-circulation oil lubrication |
| Grease                              | 2800 | min-1 | Grease lubrication                                                  |
| Oil (Oil-bath)                      | 3600 | min-1 | Oil-bath lubrication                                                |

#### Abutment and Fillet Dimensions

|           |     |    |                                   |
|-----------|-----|----|-----------------------------------|
| da (min.) | 112 | mm | Diameter of shaft abutment        |
| da (max.) | 119 | mm | Diameter of shaft abutment        |
| Da (min.) | 160 | mm | Diameter of housing abutment      |
| Da (max.) | 168 | mm | Diameter of housing abutment      |
| ra (max.) | 2   | mm | Radius of shaft or housing fillet |

#### Calculation factors

|    |      |                    |
|----|------|--------------------|
| e  | 0.24 | Constant           |
| Y2 | 4.3  | Axial load Factors |
| Y3 | 2.9  | Axial load Factors |
| Y0 | 2.8  | Axial load Factors |

#### Mass

|              |      |    |              |
|--------------|------|----|--------------|
| Mass approx. | 4.84 | kg | Mass approx. |
|--------------|------|----|--------------|

