



FAG

31309-XL

Tapered roller bearing

Tapered roller bearings 313, main dimensions  
acc. to DIN 720, separable

X-life

Informacje techniczne



Twoja aktualna wersja produktu

|                 |          |                                              |
|-----------------|----------|----------------------------------------------|
| Tolerance class | PN       | Normal (ISO 492:2023)                        |
| Heat treatment  | Standard |                                              |
| Cage            | Standard | Sheet steel cage, window cage, roller-guided |
| Internal design | Standard |                                              |
| Quality level   | XL       | X-life                                       |
| Number of rows  | 1        | Single-row design                            |

Main Dimensions & Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 45 mm       | Bore diameter                     |
| D               | 100 mm      | Outside diameter                  |
| B               | 25 mm       | Width, inner ring                 |
| C               | 18 mm       | Width, outer ring                 |
| T               | 27,25 mm    | Width, total                      |
| C <sub>r</sub>  | 119.000 N   | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 108.000 N   | Basic static load rating, radial  |
| C <sub>ur</sub> | 16.300 N    | Fatigue load limit, radial        |
| n <sub>G</sub>  | 8.600 1/min | Limiting speed                    |
| n <sub>gr</sub> | 4.650 1/min | Thermal speed rating              |
| m               | 0,96 kg     | Masa                              |



### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \max}$ | 56 mm  | Maximum diameter of shaft shoulder   |
| $d_{b \min}$ | 54 mm  | Minimum diameter of shaft shoulder   |
| $D_{a \min}$ | 79 mm  | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 91 mm  | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 95 mm  | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 4 mm   | Minimum axial space                  |
| $C_{b \min}$ | 9 mm   | Minimum axial space                  |
| $r_{a \max}$ | 2 mm   | Maximum fillet radius of shaft       |
| $r_{b \max}$ | 1,5 mm | Maximum fillet radius of housing     |

### Dimensions

|                 |         |                                                   |
|-----------------|---------|---------------------------------------------------|
| $r_{1, 2 \min}$ | 2 mm    | Minimum chamfer dimension of inner ring back face |
| $r_{3, 4 \min}$ | 1,5 mm  | Minimum chamfer dimension of outer ring back face |
| $a$             | 32 mm   | Distance between the apexes of the pressure cones |
| $d_1$           | 74,7 mm | Guidance rib diameter of inner ring               |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 120 °C | Operating temperature max. |

### Calculation factors

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| $e$   | 0,83 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y$   | 0,73 | Dynamic axial load factor                                                            |
| $Y_0$ | 0,4  | Static axial load factor                                                             |

### Additional information

T7FB045

Comparative designation to ISO 10317 and ISO 355



### Właściwości



Obciążenie promieniowe



Obciążenie osiowe jednokierunkowe



Smarowanie smarem



Smarowanie olejem



Bez uszczelnienia