



FAG

## 32221-XL

Tapered roller bearing

Schaeffler ID:  
0842637500000Tapered roller bearings 322, main  
dimensions to DIN ISO 355 / DIN 720,  
separable, adjusted or in pairs

X-life

## Technical information



## Main Dimensions &amp; Performance Data

|          |             |                                   |
|----------|-------------|-----------------------------------|
| d        | 105 mm      | Bore diameter                     |
| D        | 190 mm      | Outside diameter                  |
| B        | 50 mm       | Width, inner ring                 |
| C        | 43 mm       | Width, outer ring                 |
| T        | 53 mm       | Width, total                      |
| $C_r$    | 455.000 N   | Basic dynamic load rating, radial |
| $C_{0r}$ | 550.000 N   | Basic static load rating, radial  |
| $C_{ur}$ | 83.000 N    | Fatigue load limit, radial        |
| $n_G$    | 4.000 1/min | Limiting speed                    |
| $n_{gr}$ | 2.550 1/min | Thermal speed rating              |
|          | 6,309 kg    | Weight                            |

## Dimensions

|                       |          |   |
|-----------------------|----------|---|
|                       | T3FC105  | Comparative designation to ISO 10317 and ISO 355  |
| $r_{1,2 \text{ min}}$ | 3 mm     | Minimum chamfer dimension of inner ring back face |
| $r_{3,4 \text{ min}}$ | 2,5 mm   | Minimum chamfer dimension of outer ring back face |
| a                     | 45 mm    | Distance between the apexes of the pressure cones |
| $d_1$                 | 143,6 mm | Guidance rib diameter of inner ring               |

### Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a \max}$ | 120 mm | Maximum diameter of shaft shoulder   |
| $d_{b \min}$ | 117 mm | Minimum diameter of shaft shoulder   |
| $D_{a \min}$ | 161 mm | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 178 mm | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 180 mm | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 5 mm   | Minimum axial space                  |
| $C_{b \min}$ | 10 mm  | Minimum axial space                  |
| $r_{a \max}$ | 3 mm   | Maximum fillet radius of shaft       |
| $r_{b \max}$ | 2,5 mm | Maximum fillet radius of housing     |

### Calculation factors

|       |      |  |
|-------|------|--|
| e     | 0,42 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| Y     | 1,43 | Dynamic axial load factor  |
| $Y_0$ | 0,79 | Static axial load factor   |

### Temperature range

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