



FAG

30210-A

Tapered roller bearing

Schaeffler ID:
0167105760000Tapered roller bearings 302, main
dimensions to DIN ISO 355 / DIN 720,
separable, adjusted or in pairs

Technical information

**Main Dimensions & Performance Data**

| | | |
|----------|-------------|-----------------------------------|
| d | 50 mm | Bore diameter |
| D | 90 mm | Outside diameter |
| B | 20 mm | Width, inner ring |
| C | 17 mm | Width, outer ring |
| T | 21,75 mm | Width, total |
| C_r | 79.000 N | Basic dynamic load rating, radial |
| C_{0r} | 96.000 N | Basic static load rating, radial |
| C_{ur} | 11.500 N | Fatigue load limit, radial |
| n_G | 8.200 1/min | Limiting speed |
| n_{gr} | 5.000 1/min | Thermal speed rating |
| | 0,544 kg | Weight |

Dimensions

| | | |
|-----------------------|---------|---|
| | T3DB050 | Comparative designation to ISO 10317 and ISO 355 |
| $r_{1,2 \text{ min}}$ | 1,5 mm | Minimum chamfer dimension of inner ring back face |
| $r_{3,4 \text{ min}}$ | 1,5 mm | Minimum chamfer dimension of outer ring back face |
| a | 20 mm | Distance between the apexes of the pressure cones |
| d_1 | 68,8 mm | Guidance rib diameter of inner ring |

Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \max}$ | 58 mm | Maximum diameter of shaft shoulder |
| $d_{b \min}$ | 57 mm | Minimum diameter of shaft shoulder |
| $D_{a \min}$ | 79 mm | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 83 mm | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 85 mm | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 3 mm | Minimum axial space |
| $C_{b \min}$ | 4,5 mm | Minimum axial space |
| $r_{a \max}$ | 1,5 mm | Maximum fillet radius of shaft |
| $r_{b \max}$ | 1,5 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. |