



FAG

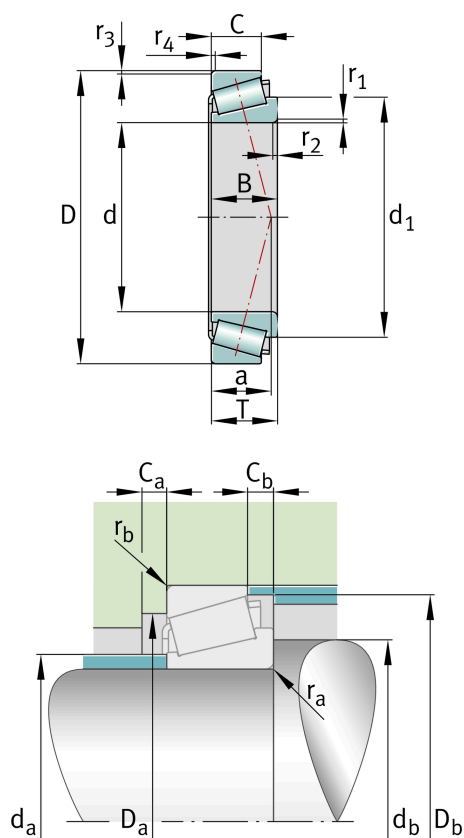
31319-XL

Tapered roller bearing

Schaeffler ID:
0932494890000Tapered roller bearings 313, main
dimensions to DIN ISO 355 / DIN 720,
separable, adjusted or in pairs

X-life

Technical information



Main Dimensions & Performance Data

| | | |
|----------|-------------|-----------------------------------|
| d | 95 mm | Bore diameter |
| D | 200 mm | Outside diameter |
| B | 45 mm | Width, inner ring |
| C | 32 mm | Width, outer ring |
| T | 49,5 mm | Width, total |
| C_r | 360.000 N | Basic dynamic load rating, radial |
| C_{0r} | 370.000 N | Basic static load rating, radial |
| C_{ur} | 52.000 N | Fatigue load limit, radial |
| n_G | 4.250 1/min | Limiting speed |
| n_{gr} | 2.800 1/min | Thermal speed rating |
| | 6,5 kg | Weight |

Dimensions

| | | |
|-----------------------|----------|---|
| $r_{1,2 \text{ min}}$ | 4 mm | Minimum chamfer dimension of inner ring back face |
| $r_{3,4 \text{ min}}$ | 3 mm | Minimum chamfer dimension of outer ring back face |
| a | 62 mm | Distance between the apexes of the pressure cones |
| d_1 | 145,6 mm | Guidance rib diameter of inner ring |

Mounting dimensions

| | | |
|--------------|---------|--------------------------------------|
| $d_{a \max}$ | 114 mm | Maximum diameter of shaft shoulder |
| $d_{b \min}$ | 109 mm | Minimum diameter of shaft shoulder |
| $D_{a \min}$ | 157 mm | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 186 mm | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 187 mm | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 6 mm | Minimum axial space |
| $C_{b \min}$ | 17,5 mm | Minimum axial space |
| $r_{a \max}$ | 4 mm | Maximum fillet radius of shaft |
| $r_{b \max}$ | 3 mm | Maximum fillet radius of housing |

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

| | |
|---------|--|
| T7GB095 | Comparative designation to ISO 10317 and ISO 355 |
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Temperature range

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