



FAG

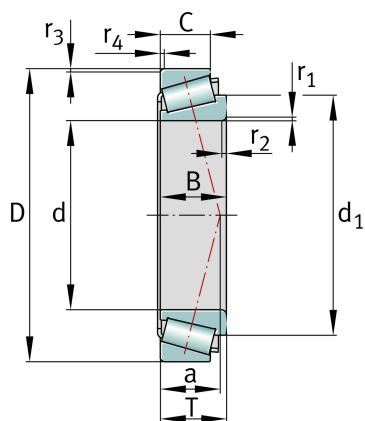
30228-XL

Tapered roller bearing

Schaeffler ID:
0783685020000Tapered roller bearings 302, main
dimensions to DIN ISO 355 / DIN 720,
separable, adjusted or in pairs

X-life

Technical information



Main Dimensions & Performance Data

| | | |
|----------|-------------|-----------------------------------|
| d | 140 mm | Bore diameter |
| D | 250 mm | Outside diameter |
| B | 42 mm | Width, inner ring |
| C | 36 mm | Width, outer ring |
| T | 45.75 mm | Width, total |
| C_r | 490,000 N | Basic dynamic load rating, radial |
| C_{0r} | 560,000 N | Basic static load rating, radial |
| C_{ur} | 76,000 N | Fatigue load limit, radial |
| n_G | 3,450 1/min | Limiting speed |
| n_{gr} | 2,040 1/min | Thermal speed rating |
| | 8.8 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 | 48 mm | Distance between the apexes of the pressure cones |
| d_1 | 188 mm | Guidance rib diameter of inner ring |

Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \max}$ | 163 mm | Maximum diameter of shaft shoulder |
| $d_{b \min}$ | 154 mm | Minimum diameter of shaft shoulder |
| $D_{a \min}$ | 219 mm | Minimum diameter of housing shoulder |
| $D_{a \max}$ | 236 mm | Maximum diameter of housing shoulder |
| $D_{b \min}$ | 234 mm | Minimum diameter of housing shoulder |
| $C_{a \min}$ | 9 mm | Minimum axial space |
| $C_{b \min}$ | 9.5 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

| | | |
|-------|---------|--|
| | T4FB140 | Comparative designation to ISO 10317 and ISO 355 |
| e | 0.43 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y | 1.38 | Dynamic axial load factor |
| Y_0 | 0.76 | Static axial load factor |

Temperature range

| | | |
|------------|--------|----------------------------|
| T_{\min} | -30 °C | Operating temperature min. |
| T_{\max} | 200 °C | Operating temperature max. |