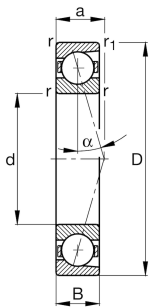
**FAG****B7010-E-T-P4S-UL** **Spindle bearing**

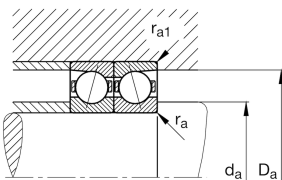
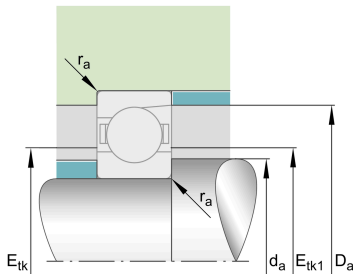
Spindle bearing B70..-E, adjusted, in pairs or sets, contact angle  $\alpha = 25^\circ$ , restricted tolerances

**Technical information****Your current product variant**

|                         |         |                                                                  |
|-------------------------|---------|------------------------------------------------------------------|
| Preload                 | L       | Preload light                                                    |
| Contact angle           | E       | Contact angle $25^\circ$                                         |
| Tolerance class         | P4S     | Tolerance class P4S, FAG standard better than P4 to ISO 492:2023 |
| Type of Seal            | Without | Not sealed                                                       |
| Cage                    | T       | Laminated fabric cage                                            |
| Arrangement bearing set | U       | Single bearing                                                   |

**Main Dimensions & Performance Data**

|                    |              |                                       |
|--------------------|--------------|---------------------------------------|
| d                  | 50 mm        | Bore diameter                         |
| D                  | 80 mm        | Outside diameter                      |
| B                  | 16 mm        | Width                                 |
| $C_r$              | 27.500 N     | Basic dynamic load rating, radial     |
| $C_{0r}$           | 15.300 N     | Basic static load rating, radial      |
| $C_{ur}$           | 1.620 N      | Fatigue load limit, radial            |
| $n_G$<br>Grease    | 16.000 1/min | Limiting speed for grease lubrication |
| $n_{G\text{ Oil}}$ | 24.000 1/min | Limiting speed for oil lubrication    |
| $\approx m$        | 0,245 kg     | Weight                                |





### Mounting dimensions

|                |         |                                                   |
|----------------|---------|---------------------------------------------------|
| $d_a$          | 56 mm   | Diameter shaft shoulder                           |
| $d_a$          | h12     | Diameter shaft shoulder clearance                 |
| $D_a$          | 74 mm   | Shoulder diameter outer ring                      |
| $D_a$          | H12     | Shoulder diameter outer ring clearance            |
| $r_{a \max}$   | 1 mm    | Maximum recess radius                             |
| $r_{a1 \max}$  | 0,3 mm  | Maximum recess radius                             |
| $E_{tk \min}$  | 59,3 mm | Minimum diameter injection pitch                  |
| $E_{tk \max}$  | 62,3 mm | Maximum diameter injection pitch                  |
| $E_{tk1 \min}$ | 59,3 mm | Minimum diameter injection pitch                  |
| $E_{tk1 \max}$ | 62,3 mm | Maximum diameter injection pitch                  |
| $a$            | 23,2 mm | Distance between the apexes of the pressure cones |

### Dimensions

|              |      |                           |
|--------------|------|---------------------------|
| $r_{\min}$   | 1 mm | Minimum chamfer dimension |
| $r_{1 \min}$ | 1 mm | Minimum chamfer dimension |
| $\alpha$     | 25 ° | Contact angle             |

### Temperature range

|            |        |                            |
|------------|--------|----------------------------|
| $T_{\min}$ | -30 °C | Operating temperature min. |
| $T_{\max}$ | 100 °C | Operating temperature max. |



Additional information

|           |                |                       |
|-----------|----------------|-----------------------|
| $F_{VL}$  | 209 N          | Preload force light   |
| $F_{VM}$  | 774 N          | Preload force medium  |
| $F_{VH}$  | 1.648 N        | Preload force heavy   |
| $K_{aEL}$ | 610 N          | Lift-off force light  |
| $K_{aEM}$ | 2.336 N        | Lift-off force medium |
| $K_{aEH}$ | 5.151 N        | Lift-off force heavy  |
| $c_{aL}$  | 120 N/ $\mu$ m | Axial rigidity light  |
| $c_{aM}$  | 197 N/ $\mu$ m | Axial rigidity medium |
| $c_{aH}$  | 270 N/ $\mu$ m | Axial rigidity heavy  |

Characteristics

-  Radial load
-  Axial load in one direction
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed