



FAG

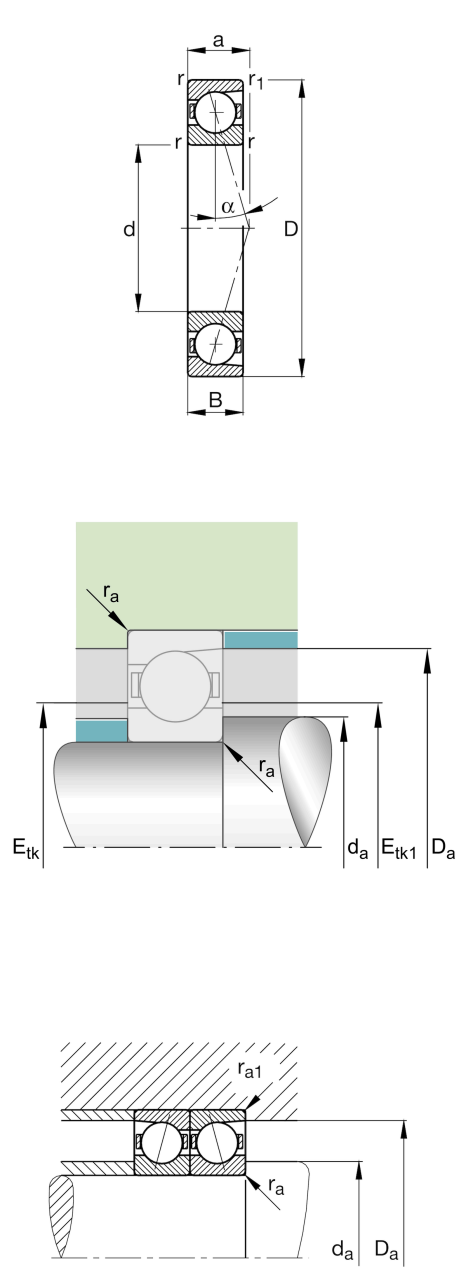
B7010-E-T-P4S-UL

Spindle bearing

Schaeffler ID:  
0190035790000

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

Technical information



Main Dimensions & Performance Data

|                       |               |                                       |
|-----------------------|---------------|---------------------------------------|
| d                     | 1,969 in      | Bore diameter                         |
| D                     | 3,15 in       | Outside diameter                      |
| B                     | 0,63 in       | Width                                 |
| C <sub>r</sub>        | 6.182,554 lbf | Basic dynamic load rating, radial     |
| C <sub>0r</sub>       | 3.439,748 lbf | Basic static load rating, radial      |
| C <sub>ur</sub>       | 364,209 lbf   | Fatigue load limit, radial            |
| n <sub>G Grease</sub> | 16.000 1/min  | Limiting speed for grease lubrication |
| n <sub>G Oil</sub>    | 24.000 1/min  | Limiting speed for oil lubrication    |
|                       | 8,829 oz      | {Weight}                              |

Mounting dimensions

|                      |          |   |
|----------------------|----------|---|
| d <sub>a</sub>       | 2,205 in | Diameter shaft shoulder                           |
| d <sub>a</sub>       | h12      | Diameter shaft shoulder clearance                 |
| D <sub>a</sub>       | 2,913 in | Shoulder diameter outer ring                      |
| D <sub>a</sub>       | H12      | Shoulder diameter outer ring clearance            |
| r <sub>a max</sub>   | 0,039 in | Maximum recess radius                             |
| r <sub>a1 max</sub>  | 0,012 in | Maximum recess radius                             |
| E <sub>tk min</sub>  | 2,335 in | Minimum diameter injection pitch                  |
| E <sub>tk max</sub>  | 2,453 in | Maximum diameter injection pitch                  |
| E <sub>tk1 min</sub> | 2,335 in | Minimum diameter injection pitch                  |
| E <sub>tk1 max</sub> | 2,453 in | Maximum diameter injection pitch                  |
| a                    | 0,913 in | Distance between the apexes of the pressure cones |

Dimensions

|                    |          |                           |
|--------------------|----------|---------------------------|
| r <sub>min</sub>   | 0,039 in | Minimum chamfer dimension |
| r <sub>1 min</sub> | 0,039 in | Minimum chamfer dimension |
| α                  | 25 °     | Contact angle             |

Temperature range

|                  |        |                            |
|------------------|--------|----------------------------|
| T <sub>min</sub> | -22 °F | Operating temperature min. |
| T <sub>max</sub> | 212 °F | Operating temperature max. |

Additional information

|                  |               |                       |
|------------------|---------------|-----------------------|
| F <sub>VL</sub>  | 46,987 lbf    | Preload force light   |
| F <sub>VM</sub>  | 174,011 lbf   | Preload force medium  |
| F <sub>VH</sub>  | 370,504 lbf   | Preload force heavy   |
| K <sub>aEL</sub> | 137,14 lbf    | Lift-off force light  |
| K <sub>aEM</sub> | 525,18 lbf    | Lift-off force medium |
| K <sub>aEH</sub> | 1.158,049 lbf | Lift-off force heavy  |
| c <sub>aL</sub>  | 120 N/μm      | Axial rigidity light  |
| c <sub>aM</sub>  | 197 N/μm      | Axial rigidity medium |
| c <sub>aH</sub>  | 270 N/μm      | Axial rigidity heavy  |