

**FAG****HSS7014-E-T-P4S-UL**

High speed spindle bearing

High speed spindle bearing HSS70...-E, adjusted, in pairs or sets, contact angle $\alpha = 25^\circ$, lip seals on both sides, non-contact, restricted tolerances

Technical information



Your current product variant

| | | |
|-------------------------|------|--|
| Contact angle | E | Contact angle 25° |
| Sealing | 2RSD | Non-contact sealed on both sides and greased "for life" |
| Cage | T | Laminated fabric cage |
| Tolerance class | P4S | Tolerance class P4S, FAG standard better than P4 to ISO 492:2023 |
| Arrangement bearing set | U | Single bearing |
| Preload class | L | Preload light |
| Lubricant | GA21 | Grease for super precision bearings, standard |

Main Dimensions & Performance Data

| | | |
|--------------------------|--------------|---------------------------------------|
| d | 70 mm | Bore diameter |
| D | 110 mm | Outside diameter |
| B | 20 mm | Width |
| C _r | 23.600 N | Basic dynamic load rating, radial |
| C _{0r} | 16.300 N | Basic static load rating, radial |
| C _{ur} | 1.720 N | Fatigue load limit, radial |
| n _G Grease | 16.000 1/min | Limiting speed for grease lubrication |
| n _G | 24.000 1/min | Limiting speed |
| ≈m | 0,64 kg | Weight |



Mounting dimensions

| | | |
|---------------|--------|---|
| d_a | 77 mm | Diameter shaft shoulder |
| d_a | h12 | Diameter shaft shoulder clearance |
| D_a | 102 mm | Shoulder diameter outer ring |
| D_a | H12 | Shoulder diameter outer ring clearance |
| $r_{a \max}$ | 1 mm | Maximum recess radius |
| $r_{a1 \max}$ | 0,6 mm | Maximum recess radius |
| a | 31 mm | Distance between the apexes of the pressure cones |

Dimensions

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

Temperature range

| | | |
|------------|--------|----------------------------|
| T_{\min} | -30 °C | Operating temperature min. |
| T_{\max} | 80 °C | Operating temperature max. |

Additional information

| | | |
|-----------|----------|-----------------------|
| F_{VL} | 141 N | Preload force light |
| F_{VM} | 423 N | Preload force medium |
| F_{VH} | 845 N | Preload force heavy |
| K_{aEL} | 406 N | Lift-off force light |
| K_{aEM} | 1.243 N | Lift-off force medium |
| K_{aEH} | 2.536 N | Lift-off force heavy |
| c_{aL} | 131 N/μm | Axial rigidity light |
| c_{aM} | 194 N/μm | Axial rigidity medium |
| c_{aH} | 253 N/μm | Axial rigidity heavy |



Characteristics



Radial load



Axial load in one direction



Lifetime lubrication, freedom from maintenance



Grease Lubrication



Sealed on both sides