

**FAG****HCS71910-E-T-P4S-UL**

High speed spindle bearing

High speed spindle bearing HCS719..-E, adjusted, in pairs or sets, contact angle $\alpha = 25^\circ$, with ceramic balls, lip seals on both sides, non-contact, restricted tolerances

Technical information



Your current product variant

| | | |
|-------------------------|------|--|
| Preload | L | Preload light |
| 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 |

Main Dimensions & Performance Data

| | | |
|-----------------|--------------|---------------------------------------|
| d | 50 mm | Bore diameter |
| D | 72 mm | Outside diameter |
| B | 12 mm | Width |
| C_r | 9.400 N | Basic dynamic load rating, radial |
| C_{0r} | 5.800 N | Basic static load rating, radial |
| C_{ur} | 470 N | Fatigue load limit, radial |
| n_G Grease | 30.000 1/min | Limiting speed for grease lubrication |
| $\approx m$ | 129,4 g | Weight |



Mounting dimensions

| | | |
|---------------|---------|---|
| d_a | 55 mm | Diameter shaft shoulder |
| d_a | h12 | Diameter shaft shoulder clearance |
| D_a | 67,5 mm | Shoulder diameter outer ring |
| D_a | H12 | Shoulder diameter outer ring clearance |
| $r_{a \max}$ | 0,6 mm | Maximum recess radius |
| $r_{a1 \max}$ | 0,15 mm | Maximum recess radius |
| a | 20,2 mm | Distance between the apexes of the pressure cones |

Dimensions

| | | |
|--------------|--------|---------------------------|
| r_{\min} | 0,6 mm | Minimum chamfer dimension |
| $r_{1 \min}$ | 0,6 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} | 39 N | Preload force light |
| F_{VM} | 116 N | Preload force medium |
| F_{VH} | 231 N | Preload force heavy |
| K_{aEL} | 110 N | Lift-off force light |
| K_{aEM} | 336 N | Lift-off force medium |
| K_{aEH} | 682 N | Lift-off force heavy |
| c_{aL} | 81 N/ μ m | Axial rigidity light |
| c_{aM} | 119 N/ μ m | Axial rigidity medium |
| c_{aH} | 154 N/ μ m | Axial rigidity heavy |



Characteristics



Radial load



Axial load in one direction



Lifetime lubrication, freedom from maintenance



Grease Lubrication



Sealed on both sides