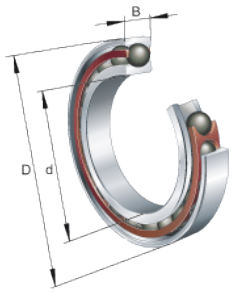


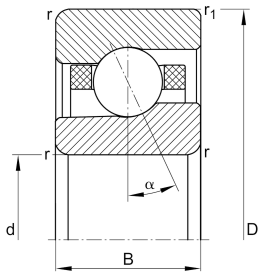

FAG

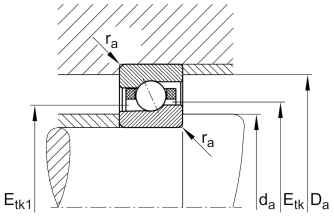
# HCM7009-C-T-P4S-UL-XL

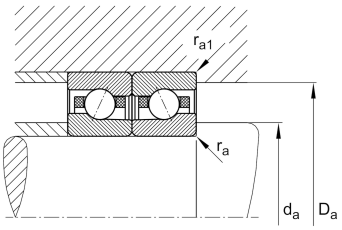
## High speed spindle bearing

High speed spindle bearing HCM70..-C, adjusted, in pairs or sets, contact angle α = 17°, with ceramic balls, restricted tolerances

## Informacje techniczne




### Twoja aktualna wersja produktu

| | | |
|---|---|---|
| Preload class | L | Preload light |
| Contact angle | Contact angle 17° | Contact angle 17° |
| Type of Seal | Without | Not sealed |
| 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 | 45 mm | Bore diameter |
| D | 75 mm | Outside diameter |
| B | 16 mm | Width |
| $C_r$ | 12.900 N | Basic dynamic load rating, radial |
| $C_{0r}$ | 6.700 N | Basic static load rating, radial |
| $C_{ur}$ | 540 N | Fatigue load limit, radial |
| $n_G$ Grease | 34.000 1/min | Limiting speed for grease lubrication |
| $n_G$ Oil | 50.000 1/min | Limiting speed for oil lubrication |
| ≈m | 234,68 g | Masa |

## Mounting dimensions

| | | |
|---|---|---|
| $d_a$ | 51 mm | Diameter shaft shoulder |
| $d_a$ | h12 | Diameter shaft shoulder clearance |
| $D_a$ | 69 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 |
| $E_{tk\ min}$ | 57,2 mm | Minimum diameter injection pitch |
| $E_{tk\ max}$ | 59 mm | Maximum diameter injection pitch |
| $E_{tk1\ min}$ | 54,8 mm | Minimum diameter injection pitch |
| $E_{tk1\ max}$ | 59 mm | Maximum diameter injection pitch |
| a | 17,3 mm | Distance between the apexes of the pressure cones |

## Dimensions

| | | |
|---|---|---|
| $r_{min}$ | 1 mm | Minimum chamfer dimension |
| $r_{1\ min}$ | 0,6 mm | Minimum chamfer dimension |
| α | 17 ° | Contact angle |

## Temperature range

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

## Additional information

| | | |
|---|---|---|
| $F_{V\,L}$ | 52 N | Preload force light |
| $F_{V\,M}$ | 137 N | Preload force medium |
| $F_{V\,H}$ | 288 N | Preload force heavy |
| $K_{aE\,L}$ | 151 N | Lift-off force light |
| $K_{aE\,M}$ | 408 N | Lift-off force medium |
| $K_{aE\,H}$ | 881 N | Lift-off force heavy |
| $c_{a\,L}$ | 43 N/µm | Axial rigidity light |
| $c_{a\,M}$ | 62 N/µm | Axial rigidity medium |
| $c_{a\,H}$ | 84 N/µm | Axial rigidity heavy |

## Właściwości

- Obciążenie promieniowe
- Obciążenie osiowe jednokierunkowe
- Smarowanie smarem
- Smarowanie olejem
- Bez uszczelnienia