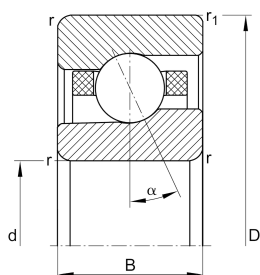
**FAG****HCM7007-C-T-P4S-UL-XL**

## High speed spindle bearing

High speed spindle bearing HCM70..-C, adjusted, in pairs or sets, contact angle  $\alpha = 17^\circ$ , with ceramic balls, restricted tolerances

## Informacje techniczne



## Twoja aktualna wersja produktu

|                         |                          |                                                                  |
|-------------------------|--------------------------|------------------------------------------------------------------|
| Preload class           | L                        | Preload light                                                    |
| Contact angle           | Contact angle $17^\circ$ | Contact angle $17^\circ$                                         |
| 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 &amp; Performance Data

|                        |              |                                       |
|------------------------|--------------|---------------------------------------|
| d                      | 35 mm        | Bore diameter                         |
| D                      | 62 mm        | Outside diameter                      |
| B                      | 14 mm        | Width                                 |
| $C_r$                  | 11.300 N     | Basic dynamic load rating, radial     |
| $C_{0r}$               | 5.000 N      | Basic static load rating, radial      |
| $C_{ur}$               | 405 N        | Fatigue load limit, radial            |
| $n_{G \text{ Grease}}$ | 43.000 1/min | Limiting speed for grease lubrication |
| $n_{G \text{ Oil}}$    | 63.000 1/min | Limiting speed for oil lubrication    |
| $\approx m$            | 140,3 g      | Masa                                  |



Mounting dimensions

|                      |         |                                                   |
|----------------------|---------|---------------------------------------------------|
| d <sub>a</sub>       | 41 mm   | Diameter shaft shoulder                           |
| d <sub>a</sub>       | h12     | Diameter shaft shoulder clearance                 |
| D <sub>a</sub>       | 56 mm   | Shoulder diameter outer ring                      |
| D <sub>a</sub>       | H12     | Shoulder diameter outer ring clearance            |
| r <sub>a</sub> max   | 1 mm    | Maximum recess radius                             |
| r <sub>a1</sub> max  | 0,3 mm  | Maximum recess radius                             |
| E <sub>tk</sub> min  | 44,7 mm | Minimum diameter injection pitch                  |
| E <sub>tk</sub> max  | 46,6 mm | Maximum diameter injection pitch                  |
| E <sub>tk1</sub> min | 42,3 mm | Minimum diameter injection pitch                  |
| E <sub>tk1</sub> max | 46,6 mm | Maximum diameter injection pitch                  |
| a                    | 14,4 mm | Distance between the apexes of the pressure cones |

Dimensions

|                    |        |                           |
|--------------------|--------|---------------------------|
| r <sub>min</sub>   | 1 mm   | Minimum chamfer dimension |
| r <sub>1</sub> min | 0,6 mm | Minimum chamfer dimension |
| α                  | 17 °   | Contact angle             |

Temperature range

|                  |        |                            |
|------------------|--------|----------------------------|
| T <sub>min</sub> | -30 °C | Operating temperature min. |
| T <sub>max</sub> | 100 °C | Operating temperature max. |



Additional information

|           |         |                       |
|-----------|---------|-----------------------|
| $F_{VL}$  | 39 N    | Preload force light   |
| $F_{VM}$  | 103 N   | Preload force medium  |
| $F_{VH}$  | 217 N   | Preload force heavy   |
| $K_{aEL}$ | 114 N   | Lift-off force light  |
| $K_{aEM}$ | 307 N   | Lift-off force medium |
| $K_{aEH}$ | 663 N   | Lift-off force heavy  |
| $c_{aL}$  | 33 N/μm | Axial rigidity light  |
| $c_{aM}$  | 48 N/μm | Axial rigidity medium |
| $c_{aH}$  | 64 N/μm | Axial rigidity heavy  |

Właściwości

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