



FAG

HS7024-E-T-P4S-UL

High speed spindle bearing

High speed spindle bearing HS70...-E,  
adjusted, in pairs or sets, contact angle  $\alpha = 25^\circ$ , restricted tolerances

Informacje techniczne



Twoja aktualna wersja produktu

|                         |         |                                                                  |
|-------------------------|---------|------------------------------------------------------------------|
| Contact angle           | E       | Contact angle 25°                                                |
| Sealing                 | 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                                                   |
| Preload                 | L       | Preload light                                                    |

Main Dimensions & Performance Data

|                       |              |                                       |
|-----------------------|--------------|---------------------------------------|
| d                     | 120 mm       | Bore diameter                         |
| D                     | 180 mm       | Outside diameter                      |
| B                     | 28 mm        | Width                                 |
| C <sub>r</sub>        | 46.500 N     | Basic dynamic load rating, radial     |
| C <sub>0r</sub>       | 38.500 N     | Basic static load rating, radial      |
| C <sub>ur</sub>       | 3.300 N      | Fatigue load limit, radial            |
| n <sub>G Grease</sub> | 9.500 1/min  | Limiting speed for grease lubrication |
| n <sub>G Oil</sub>    | 14.000 1/min | Limiting speed for oil lubrication    |
| n <sub>G</sub>        | 14.000 1/min | Limiting speed                        |
| ≈m                    | 2,22 kg      | Masa                                  |





Mounting dimensions

|                      |          |                                                   |
|----------------------|----------|---------------------------------------------------|
| d <sub>a</sub>       | 131 mm   | Diameter shaft shoulder                           |
| d <sub>a</sub>       | h12      | Diameter shaft shoulder clearance                 |
| D <sub>a</sub>       | 169 mm   | Shoulder diameter outer ring                      |
| D <sub>a</sub>       | H12      | Shoulder diameter outer ring clearance            |
| r <sub>a</sub> max   | 2 mm     | Maximum recess radius                             |
| r <sub>a1</sub> max  | 1 mm     | Maximum recess radius                             |
| E <sub>tk</sub> min  | 143,3 mm | Minimum diameter injection pitch                  |
| E <sub>tk</sub> max  | 146,4 mm | Maximum diameter injection pitch                  |
| E <sub>tk1</sub> min | 139,2 mm | Minimum diameter injection pitch                  |
| E <sub>tk1</sub> max | 146,4 mm | Maximum diameter injection pitch                  |
| a                    | 49 mm    | Distance between the apexes of the pressure cones |

Dimensions

|                    |      |                           |
|--------------------|------|---------------------------|
| r <sub>min</sub>   | 2 mm | Minimum chamfer dimension |
| r <sub>1 min</sub> | 2 mm | Minimum chamfer dimension |
| α                  | 25 ° | Contact angle             |

Temperature range

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



Additional information

|           |                |                       |
|-----------|----------------|-----------------------|
| $F_{VL}$  | 276 N          | Preload force light   |
| $F_{VM}$  | 828 N          | Preload force medium  |
| $F_{VH}$  | 1.656 N        | Preload force heavy   |
| $K_{aEL}$ | 795 N          | Lift-off force light  |
| $K_{aEM}$ | 2.426 N        | Lift-off force medium |
| $K_{aEH}$ | 4.942 N        | Lift-off force heavy  |
| $c_{aL}$  | 203 N/ $\mu$ m | Axial rigidity light  |
| $c_{aM}$  | 302 N/ $\mu$ m | Axial rigidity medium |
| $c_{aH}$  | 392 N/ $\mu$ m | Axial rigidity heavy  |

Właściwości

- 

Obciążenie promieniowe
- 

Obciążenie osiowe jednokierunkowe
- 

Smarowanie smarem
- 

Smarowanie olejem
- 

Bez uszczelnienia