

**FAG****B7024-C-T-P4S-UL**

## Spindle bearing

Spindle bearing B70...-C, adjusted, in pairs or sets, contact angle  $\alpha = 15^\circ$ , restricted tolerances

## Technical information



## Your current product variant

|                         |         |                                                                  |
|-------------------------|---------|------------------------------------------------------------------|
| Preload                 | L       | Preload light                                                    |
| Contact angle           | C       | Contact angle $15^\circ$                                         |
| Tolerance class         | P4S     | Tolerance class P4S, FAG standard better than P4 to ISO 492:2023 |
| Sealing                 | Without | Not sealed                                                       |
| Cage                    | T       | Laminated fabric cage                                            |
| Arrangement bearing set | U       | Single bearing                                                   |

## Main Dimensions &amp; Performance Data

|                    |              |                                       |
|--------------------|--------------|---------------------------------------|
| d                  | 120 mm       | Bore diameter                         |
| D                  | 180 mm       | Outside diameter                      |
| B                  | 28 mm        | Width                                 |
| $C_r$              | 115.000 N    | Basic dynamic load rating, radial     |
| $C_{0r}$           | 82.000 N     | Basic static load rating, radial      |
| $C_{ur}$           | 7.100 N      | Fatigue load limit, radial            |
| $n_G$<br>Grease    | 7.500 1/min  | Limiting speed for grease lubrication |
| $n_{G\text{ Oil}}$ | 12.000 1/min | Limiting speed for oil lubrication    |
| $\approx m$        | 2,07 kg      | Weight                                |





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  | 138,6 mm | Minimum diameter injection pitch                  |
| E <sub>tk</sub> max  | 145,1 mm | Maximum diameter injection pitch                  |
| E <sub>tk1</sub> min | 138,6 mm | Minimum diameter injection pitch                  |
| E <sub>tk1</sub> max | 145,1 mm | Maximum diameter injection pitch                  |
| a                    | 34,1 mm  | Distance between the apexes of the pressure cones |

Dimensions

|                    |      |                           |
|--------------------|------|---------------------------|
| r <sub>min</sub>   | 2 mm | Minimum chamfer dimension |
| r <sub>1</sub> min | 2 mm | Minimum chamfer dimension |
| α                  | 15 ° | Contact angle             |

Temperature range

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



Additional information

|           |                |                       |
|-----------|----------------|-----------------------|
| $F_{VL}$  | 653 N          | Preload force light   |
| $F_{VM}$  | 2.069 N        | Preload force medium  |
| $F_{VH}$  | 4.129 N        | Preload force heavy   |
| $K_{aEL}$ | 2.008 N        | Lift-off force light  |
| $K_{aEM}$ | 6.858 N        | Lift-off force medium |
| $K_{aEH}$ | 14.599 N       | Lift-off force heavy  |
| $c_{aL}$  | 123 N/ $\mu$ m | Axial rigidity light  |
| $c_{aM}$  | 206 N/ $\mu$ m | Axial rigidity medium |
| $c_{aH}$  | 293 N/ $\mu$ m | Axial rigidity heavy  |

Characteristics

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Radial load
- 

Axial load in one direction
- 

Grease Lubrication
- 

Oil Lubrication
- 

Not sealed