



FAG

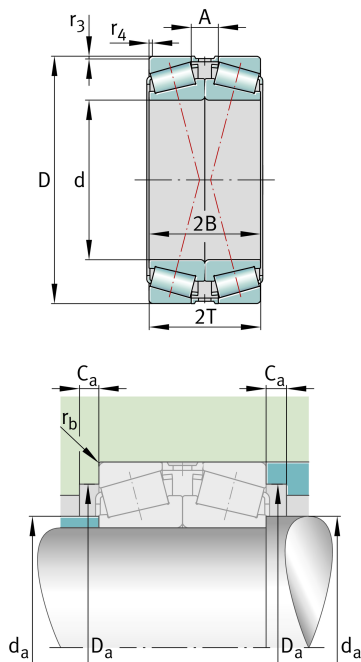
31316-XL-DF-A100-140

Tapered roller bearing set

Tapered roller bearing set 313...-DF, X-arrangement

X-life

Informacje techniczne



Twoja aktualna wersja produktu

|                          |          |                                                 |
|--------------------------|----------|-------------------------------------------------|
| Tolerance class          | PN       | Normal (ISO 492:2023)                           |
| Heat treatment           | Standard |                                                 |
| Cage                     | Standard | Sheet steel cage, window cage, roller-guided    |
| Axial internal clearance | A100-140 | Axial internal clearance between 100 and 140 µm |
| Quality level            | XL       | X-life                                          |
| Matched arrangement      | F        | X arrangement                                   |
| Number of rows           | 2        | Double-row design                               |

Main Dimensions & Performance Data

|                 |             |                                   |
|-----------------|-------------|-----------------------------------|
| d               | 80 mm       | Bore diameter                     |
| D               | 170 mm      | Outside diameter                  |
| 2B              | 78 mm       | Inner ring total width            |
| 2T              | 85 mm       | Outer ring total width            |
| C <sub>r</sub>  | 485.000 N   | Basic dynamic load rating, radial |
| C <sub>0r</sub> | 540.000 N   | Basic static load rating, radial  |
| C <sub>ur</sub> | 79.000 N    | Fatigue load limit, radial        |
| n <sub>G</sub>  | 5.000 1/min | Limiting speed                    |
| n <sub>gr</sub> | 2.950 1/min | Thermal speed rating              |
| ≈m              | 8,652 kg    | Masa                              |



Mounting dimensions

|              |        |                                      |
|--------------|--------|--------------------------------------|
| $d_{a\ max}$ | 97 mm  | Maximum diameter of shaft shoulder   |
| $D_{a\ min}$ | 134 mm | Minimum diameter of housing shoulder |
| $D_{a\ max}$ | 158 mm | Maximum diameter of housing shoulder |
| $C_{a\ min}$ | 6 mm   | Minimum axial space                  |
| $r_{b\ max}$ | 2,5 mm | Maximum fillet radius of housing     |

Dimensions

|                  |        |                                                   |
|------------------|--------|---------------------------------------------------|
| $r_{3,\ 4\ min}$ | 2,5 mm | Minimum chamfer dimension of outer ring back face |
| A                | 31 mm  | Width of spacer                                   |

Temperature range

|           |        |                            |
|-----------|--------|----------------------------|
| $T_{min}$ | -30 °C | Operating temperature min. |
| $T_{max}$ | 120 °C | Operating temperature max. |

Calculation factors

|       |      |                                                                                      |
|-------|------|--------------------------------------------------------------------------------------|
| e     | 0,83 | Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y |
| $Y_1$ | 0,82 | Dynamic axial load factor                                                            |
| $Y_2$ | 1,22 | Dynamic axial load factor                                                            |
| $Y_0$ | 0,8  | Static axial load factor                                                             |

Właściwości

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