

## NUP 2318 ECML

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one integral flange and one loose flange ring on the inner ring, NUP design bearings can locate the shaft axially in both directions. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.



- High radial load carrying capacity
- Low friction
- Long service life
- Locate the shaft axially in both directions
- Separable design



| Dimensions       |            |                                        |
|------------------|------------|----------------------------------------|
| d                | 90 mm      | Bore diameter                          |
| D                | 190 mm     | Outside diameter                       |
| B                | 64 mm      | Width                                  |
| d <sub>1</sub>   | ≈ 124 mm   | Shoulder diameter of inner ring        |
| D <sub>1</sub>   | ≈ 161.1 mm | Shoulder diameter of outer ring        |
| F                | 113.5 mm   | Raceway diameter of inner ring         |
| r <sub>1,2</sub> | min. 3 mm  | Chamfer dimension                      |
| r <sub>3,4</sub> | min. 3 mm  | Chamfer dimension of loose flange ring |



| Abutment dimensions |               |                              |
|---------------------|---------------|------------------------------|
| d <sub>a</sub>      | min. 104 mm   | Diameter of spacer sleeve    |
| d <sub>b</sub>      | min. 127 mm   | Diameter of shaft abutment   |
| D <sub>a</sub>      | max. 175.3 mm | Diameter of housing abutment |
| r <sub>a</sub>      | max. 2.5 mm   | Radius of fillet             |

## Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| AGA performance class     |                | AGA Explorer |
| Basic dynamic load rating | C              | 500 kN       |
| Basic static load rating  | C <sub>0</sub> | 540 kN       |
| Fatigue load limit        | P <sub>u</sub> | 65.5 kN      |
| Reference speed           |                | 3 800 r/min  |
| Limiting speed            |                | 6 700 r/min  |
| Minimum load factor       | k <sub>r</sub> | 0.38         |
| Limiting value            | e              | 0.3          |
| Calculation factor        | Y              | 0.4          |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (), P6, Normal (inch)
- Radial internal clearance: cylindrical bore, tapered bore
- Axial internal clearance: NUP, NJ + HJ

### BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit