

## PDF technical sheet 22334EKF800



### Double row spherical roller bearings

Spherical roller bearing for vibratory applications, one-piece machined cage, groove and lubrication holes on outer ring, tapered bore 1:12, special C4 class clearance

| Product definition          |            |
|-----------------------------|------------|
| d                           | 6.6929 "   |
| D                           | 14.1732 "  |
| B                           | 4.7244 "   |
| d2                          | 9.2913 "   |
| D1                          | 12.3189 "  |
| rs min                      | 0.1575 "   |
| Number of lubrication holes | 3          |
| b                           | 0.7992 "   |
| k                           | 0.3937 "   |
| Associated sleeve reference | H2334      |
| e                           | 0.32       |
| Y1                          | 2.09       |
| Y2                          | 3.11       |
| Y0                          | 2.04       |
| Radial clearance class      | C4 Special |
| Mass                        | 205.29 oz  |
| Brand                       | SNR        |



| Product performance                           |           |
|-----------------------------------------------|-----------|
| Dynamic load, C                               | 2,200 kN  |
| Static load, C0                               | 2,630 kN  |
| Fatigue limit load, Cu                        | 175 kN    |
| Nref                                          | 1,200 RPM |
| Nlim                                          | 1,800 RPM |
| Min operating temperature, Tmin               | -40 °C    |
| Max operating temperature, Tmax               | 392 °C    |
| Characteristic cage frequency, FTF            | 0.42 Hz   |
| Characteristic rolling element frequency, BSF | 5.68 Hz   |
| Characteristic outer ring frequency, BPF0     | 7.08 Hz   |
| Characteristic inner ring frequency, BPF1     | 9.92 Hz   |



### Abutment dimensions

|        |           |
|--------|-----------|
| da min | 7.3622 "  |
| db min | 7.2835 "  |
| Ce min | 0.3150 "  |
| Da max | 13.5039 " |
| ra max | 0.1181 "  |

### Calculation factors

#### Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

| $F_a / F_r \leq e$ |    | $F_a / F_r > e$ |    |
|--------------------|----|-----------------|----|
| X                  | Y  | X               | Y  |
| 1                  | Y1 | 0.67            | Y2 |

#### Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

| $X_0$ | $Y_0$ |
|-------|-------|
| 1     | Y0    |

The values for e, Y1, Y2 and Y0 are shown in the above table .