

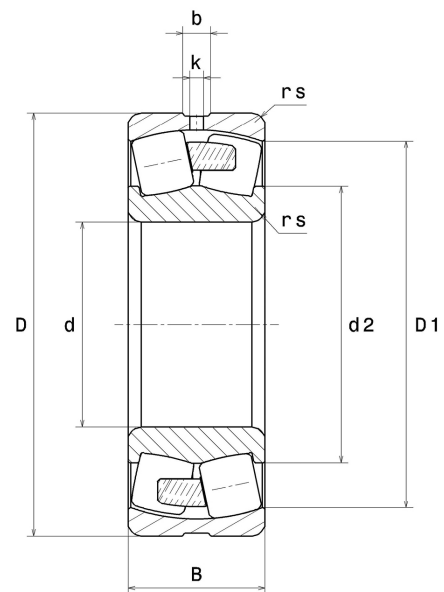
PDF technical sheet 22218EMW33



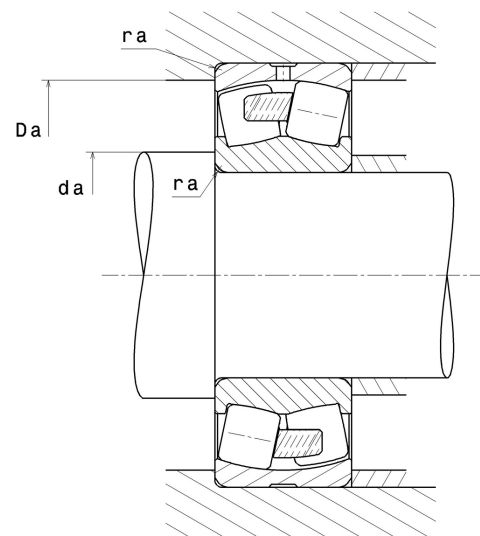
Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring

| Product definition | |
|-----------------------------|----------|
| d | 3.5433 " |
| D | 6.2992 " |
| B | 1.5748 " |
| D1 | 5.6378 " |
| rs min | 0.0787 " |
| Number of lubrication holes | 3 |
| b | 0.4016 " |
| k | 0.1772 " |
| e | 0.23 |
| Y1 | 2.9 |
| Y2 | 4.31 |
| Y0 | 2.83 |
| Radial clearance class | CN |
| Mass | 11.64 oz |
| Brand | SNR |



| Product performance | |
|---|-----------|
| Dynamic load, C | 384 kN |
| Static load, C0 | 398 kN |
| Fatigue limit load, Cu | 43.10 kN |
| Nref | 3,900 RPM |
| Nlim | 5,100 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 | 6.24 Hz |
| Characteristic outer ring frequency, BPF0 | 7.61 Hz |
| Characteristic inner ring frequency, BPF1 | 10.39 Hz |



Abutment dimensions

| | |
|--------|----------|
| da min | 3.9764 " |
| Da max | 5.8661 " |
| ra max | 0.0787 " |

Calculation factors

Equivalent dynamic radial load

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

| Fa / Fr ≤ e | | Fa / Fr > 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 .