# SKF 351019 C Bearings Makers: Technical Guide for Selection, Installation, and Maintenance

Zenith Bearings • Authorized dealer: KOYO / NKE / FAG / SKF / NTN / TIMKEN / INA / NSK


## Instant TL;DR (Selection Card)

**What it is:** Technical reference for SKF 351019 C cylindrical roller bearing, covering specifications, selection criteria, installation practices, lubrication, and troubleshooting.

**Best for:**

- High-load radial applications with axial limits
- Heavy machinery where misalignment tolerance is tight
- SKF 351019 C suitable in standard industrial bearing housings

**Key selection criteria:**

- Load type (radial/combined)
- Dynamic rating and L10 life
- Inner/outer race fits (CN/C3/C4)
- Lubrication type (grease/oil)
- Operating temperature and contamination control

**Watch-outs:**

- Exceeding dynamic rating or misalignment limits
- Inadequate lubrication leading to wear
- Improper preload/endplay causing vibration
- Incorrect shaft/housing fits or mounting method

**Zenith Bearings value:** Provides field-ready guidelines for selecting, fitting, and maintaining SKF 351019 C bearings with emphasis on performance, reliability, and lifecycle cost


## Key Specifications & Procurement Notes

| Item | Parameter | Typical Range / Note |
|---|---|---|
| 1 | Bearing type | SKF cylindrical roller bearing, single-row with 351019 C designation |
| 2 | Bore diameter | mm 190–195 (confirm exact OEM size for 351019 C variant) |
| 3 | Dynamic load rating (C) | High capability; dependent on clearance and cage design |
| 4 | Static load rating (Co) | Significant static capacity for heavy radial loads |
| 5 | Lubrication | Grease or oil lubrication depending on application; sealing varies by housing |

## Selection Checklist (Field-Usable)

- ✓ Identify load type (radial vs combined)
- ✓ Verify fits: shaft and housing clearances (CN/C3/C4)
- ✓ Determine operating speed and required L10 life
- ✓ Choose lubrication method and seals
- ✓ Assess mounting method and preload/endplay
- ✓ Confirm ambient temperature and contamination controls

## Installation & Removal — Do / Don’t

### Do

- Clean shafts and housings before assembly
- Use appropriate seals and housings compatible with SKF 351019 C
- Set correct endplay and preload per bearing spec
- Use calibrated torque and axial locking mechanisms
- Lubricate per lubricant manufacturer's recommendations

### Don’t

- Re-use damaged shafts or housings
- Over-tighten fittings causing distortion
- Use incompatible lubricants or seals
- Operate at speeds beyond rated limits without verification

## Failure Diagnosis Quick Table

| Symptom | Likely Causes | Recommended Actions |
|---|---|---|

| | | |
|---|---|---|
| Excessive radial play observed | Poor preload or endplay; worn inner/outer racers | Re-check preload, shim stack, and race seating; replace worn components |
| Rough friction or sticking during rotation | Insufficient lubrication; contamination | Inspect lubrication path, replace lubricant, clean seals, check contamination level |
| Excessive heat at bearing housing | Overload or misalignment; incompatible lubricant | Recalculate load ratings, verify alignment, adjust lubrication schedule |
| Vibration at startup or during run | Misalignment; unbalanced assembly | Re-measure shaft runout, re-align, balance assembly, verify mounting bolts torque |
| Seal leakage or contamination ingress | Cracked seal or housing damage | Replace seals, inspect housing grooves, ensure proper seal seating |

## Lubrication & Relubrication Notes

- Select grease for moderate speed and medium temperature ranges; oil lubrication for high-speed or high-temperature applications; SKF grease types recommended for 351019 C variant
- Maintain clean oil/gas-free environment; replace lubricant at intervals based on load, speed and exposure
- Check lubrication film thickness and viscosity; avoid over-lubrication which increases heat and resistance
- Ensure seals are compatible with lubricant and operate within temperature range

## Frequently Asked Questions (FAQs)

### Q1. What is the typical application range for SKF 351019 C bearings?

Medium to heavy radial loads in industrial machinery; suitable for misalignment allowances within specified clearance and cage design limits

### Q2. What clearance class is recommended?

CN/C3 or CN/C4 depending on shaft fit and thermal expansion expectations; verify manufacturer data for exact part variation

### Q3. What lubrication options are preferred?

Grease for low-to-moderate speed with restricted grease delivery; oil for high-speed or high-temperature service; ensure seals match lubricant type

### Q4. How is life expectancy assessed?

Use L10 life calculation based on dynamic load, speed, lubricant condition, and misalignment; target maintenance intervals to achieve design L10h life under expected conditions

### Q5. What installation checks are critical?

Clean mating surfaces, correct preload, proper endplay, correct fit class, secure locking mechanism, and verification of runout and alignment

### Q6. What failure modes are common?

Overload, inadequate lubrication, contamination, improper mounting, seal failure, misalignment

## About Zenith Bearings

Zenith Bearings: Authorized distributor of KOYO, NKE, FAG, SKF, NTN, TIMKEN, INA, NSK. Technical guidance and availability for the SKF 351019 C bearing variant and related mounting, lubrication, and maintenance solutions.

Note: Final bearing selection and life depend on actual operating conditions, fits, lubrication, and OEM guidance.

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