

We pioneer motion

Insutect A coating for current-insulated bearings

Reliable protection against damage caused by current passage

Insutect A - developed to protect your investments

Parasitic currents can cause adverse damage and wear to rolling bearings and lubricants that can affect the reliability of your systems, with possible consequences including unplanned downtime and high maintenance costs. With the improved Insutect A coating (series J2OG), Schaeffler has developed a solution that significantly extends the life of the rolling bearing and ensures efficient protection, even in high humidity. Whatever the application – whether electric motors with variable frequency drives, generators in wind turbines, or traction motors for rail vehicles – the Insutect A coating allows Schaeffler to deliver the right solution every time.

SCHAEFFLER

Insutect A coating for current-insulated bearings

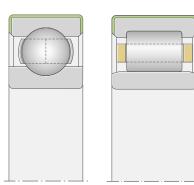
Discover the distinguishing features of the new J20G-series bearings with Insutect A coating:

- Improved coating process
 - For even more reliable protection, even under humid operating conditions.
 All bearings in this series can withstand breakdown voltages of at least 3,000 V.
- More efficient insulation protection
 - Proven bearing protection courtesy of a higher impedance and a minimum ohmic resistance of 250 MΩ.
- Increased reliability
 - The ceramic oxide coating is particularly wear-resistant and provides effective levels of thermal conductivity.
- Economical protection against damage caused by current passage
- Insutect A bearings are often a more cost-effective solution to current passage than hybrid bearings, especially at larger sizes.

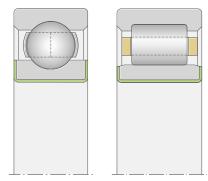
The benefits to you:

- Reduced risk of bearing damage caused by current passage
- Reduced maintenance costs and increased machine reliability
- Increased lubricating grease operating life
- The same dimensions and tolerances as standard bearings

The standard coating J20GA has been proven to meet the economic and technical requirements for a wide range of industrial applications. For increased requirements or higher electrical currents, as encountered in the rail sector, we recommend the premium coating J20GB. Bearings in the J20G series with a coated inner ring (J20GI) offer the highest level of impedance and therefore the best possible protection against electrical currents. We would be glad to assist you with our customized solutions.



Outer ring coating J20GA, J20GB



Inner ring coating J20GI

	J20GA	J20GB	J20GI
Type of coating	Outer ring	Outer ring	Inner ring
((�)) Breakdown voltage (DC)	3.000 V	3.000 V	3.000 V
Layer thickness	120 µm	200 µm	120 µm
Ohmic resistance	250 ΜΩ	400 ΜΩ	250 ΜΩ
// Impedance (6314, f=100 kHz)	273 Ω	428 Ω	583 Ω
Operating environment (dry/humid)	++ ++	++ ++	++ ++
Possible dimensions	70 mm – 800 mm Outside diameter	70 mm – 800 mm Outside diameter	≥ 70 mm Bore diameter

Properties at a glance



Schaeffler Technologies AG & Co. KG Georg-Schäfer-Strasse 30 97421 Schweinfurt (Germany) www.schaeffler.com · info@schaeffler.com