

# Schaeffler Current-Insulated Bearings

## The problem:

Damage caused by electrical current passing through bearings in electric motors.

## The solution:

Current-insulated bearings from Schaeffler — including hybrid ceramic or ceramic-coated versions featuring our proprietary Insutect™ coating — that have been engineered to stop stray electric current in its tracks.

### J20AA Outer ring ceramic coated

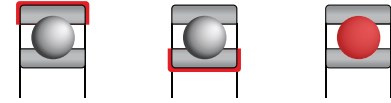
- Protection up to 3000 VDC
- Cost-effective solution
- Fully interchangeable with standard bearings
- Stationary outer ring

### J20C Inner ring ceramic coated

- Suitable for high-frequency currents
- Rotating outer ring permissible
- Fully interchangeable with standard bearings

### HC Ceramic balls or cylindrical rollers

- Highest resistance value
- Lower rolling friction generally leads to lower operating temperatures
- Longer grease life
- Significantly higher reliability
- Fully interchangeable with standard bearings



Designation	J20AA	J20C	HC
Insulation type	outer ring ceramic coated	inner ring ceramic coated	ceramic ball or cylindrical rollers
Disruptive voltage	3000 VDC		∞
Operating environment	dry, damp		
Coating thickness	200 μm		NA
Seals / Shields	RSR seal	Z-shield or RSR seal	Z-shield or RSR seal
Electrical resistance	+		++
Limiting speed	-		++
Grease life	-		+
Energy efficiency	-		+
Service life	-		+

- ++ Especially suitable
- + Suitable
- Same as standard bearing

Red area in cross sections above indicates insulated bearing feature

**SCHAEFFLER**

Standard Size Range & Availability

6200 Series Ball Bearing / NU2 Series X-life Cylindrical Roller Bearing

Bore	Ball Bearing			Cylindrical Roller Bearing (X-life)	
	6200	Hybrid	J20	NU2	J20
03	6203	HC			
04	6204	HC			
05	6205	HC			
06	6206	HC			
07	6207	HC			
08	6208	HC			
09	6209	HC			
10	6210	HC		NU210	J20AA
11	6211	HC			
12	6212	HC		NU212	J20AA
13	6213	HC		NU213	J20AA
14	6214	HC	J20AA	NU214	J20AA
15	6215	HC	J20AA	NU215	J20AA
16	6216	HC	J20AA	NU216	J20AA
17	6217	HC	J20AA	NU217	J20AA
18	6218	HC	J20AA	NU218	J20AA
19	6219	HC	J20AA	NU219	J20AA
20	6220	HC	J20AA	NU220	J20AA
22	6222	HC	J20AA	NU222	J20AA
24	6224		J20AA	NU224	J20AA
26	6226		J20AA	NU226	J20AA
28	6228		J20AA		
30	6230		J20AA		
32	6232	HC	J20AA		
34					
36	6236		J20AA		
38					

Other sizes available upon request

Standard Size Range & Availability

6300 Series Ball Bearing / NU3 Series X-life Cylindrical Roller Bearing

Bore	Ball Bearing			Cylindrical Roller Bearing (X-life)		
	6300	Hybrid	J20	NU3	J20	
03						
04						
05	6305	HC				
06	6306	HC				
07	6307	HC				
08	6308	HC				
09	6309	HC	J20AA			
10	6310	HC	J20AA			
11	6311	HC	J20AA			
12	6312	HC	J20AA			
13	6313	HC	J20AA	NU313	J20AA	
14	6314	HC	J20AA			
15	6315	HC	J20AA			
16	6316	HC	J20AA	NU316	J20AA	
17	6317	HC	J20AA			
18	6318	HC	J20AA	NU318	J20AA	
19	6319	HC	J20AA	NU319	J20AA	
20	6320	HC	J20AA	NU320	J20AA	
22	6222		J20AA	NU322	J20AA	
24	6224		J20AA	J20C	NU324	J20AA
26	6226		J20AA		NU326	J20AA
28	6328	HC		J20C	NU328	J20AA
30	6330	HC	J20AA	J20C		
32	6332	HC	J20AA			
34	6334		J20AA			
36	6336			J20C		
38	6338			J20C		

Other sizes available upon request

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