

THE PERFECT SOLUTION TO INDUSTRIAL APPLICATIONS

Under adverse conditions the rolling bearings used in electrical machines can sustain damage through current discharge.

The electrical current passing through the bearing may be caused by

- / Incorrect or faulty wiring
- / Faulty or damaged earth connections resulting in insufficient potential equalisation
- / Unshielded and/or asymmetric wiring in electric motors
- / Asymmetrical magnetic flux
- / Fast acting frequency converters

The potential for damage can be eliminated by:

- / Ensuring correct wiring
- / Sufficient earth connection
- / Isolated coupling to the electrical machine
- / Electric filters
- / Grounding of rotors and brushes

Application examples in different industries.

NKE has developed bearing solutions for numerous types of electric machinery, including:

- / Electric motors (various sizes and applications)
- / Out of balance motors (shaker screen)
- / Traction motors for railway vehicles
- / Motor drives for oil and gas applications
- / Generators for wind turbines
- / etc.

NKE electrically insulated bearings - efficient and effective



WE ARE FERSA GROUP A SPANISH-AUSTRIAN COMPANY

Fersa Group was created through the merger of two European bearing manufacturers: Fersa Bearings in Spain and NKE in Austria. Both are globally active in the design, production and distribution of high quality bearings for the global automotive and industrial markets.

Over 50 years of manufacturing experience and the trust of leading OEMs, Tier 1 and their respective aftermarkets endorse our products and services.

Fersa Group has an extensive network of distribution centers that service globally. We count with local facilities in Austria, Brazil, China, Spain and USA and state-of-the-art manufacturing centers in Austria, China and Spain.

FERSAGROUP



NKE AUSTRIA GmbH
Im Stadtgut C4,
4407 Steyr, Austria
Tel: +43 7252 86667
Fax: +43 7252 86667-59
office@nke.at

www.nke.at

NKE
B E A R I N G S



NKE Steyr, Austria



FERSA Zaragoza, Spain

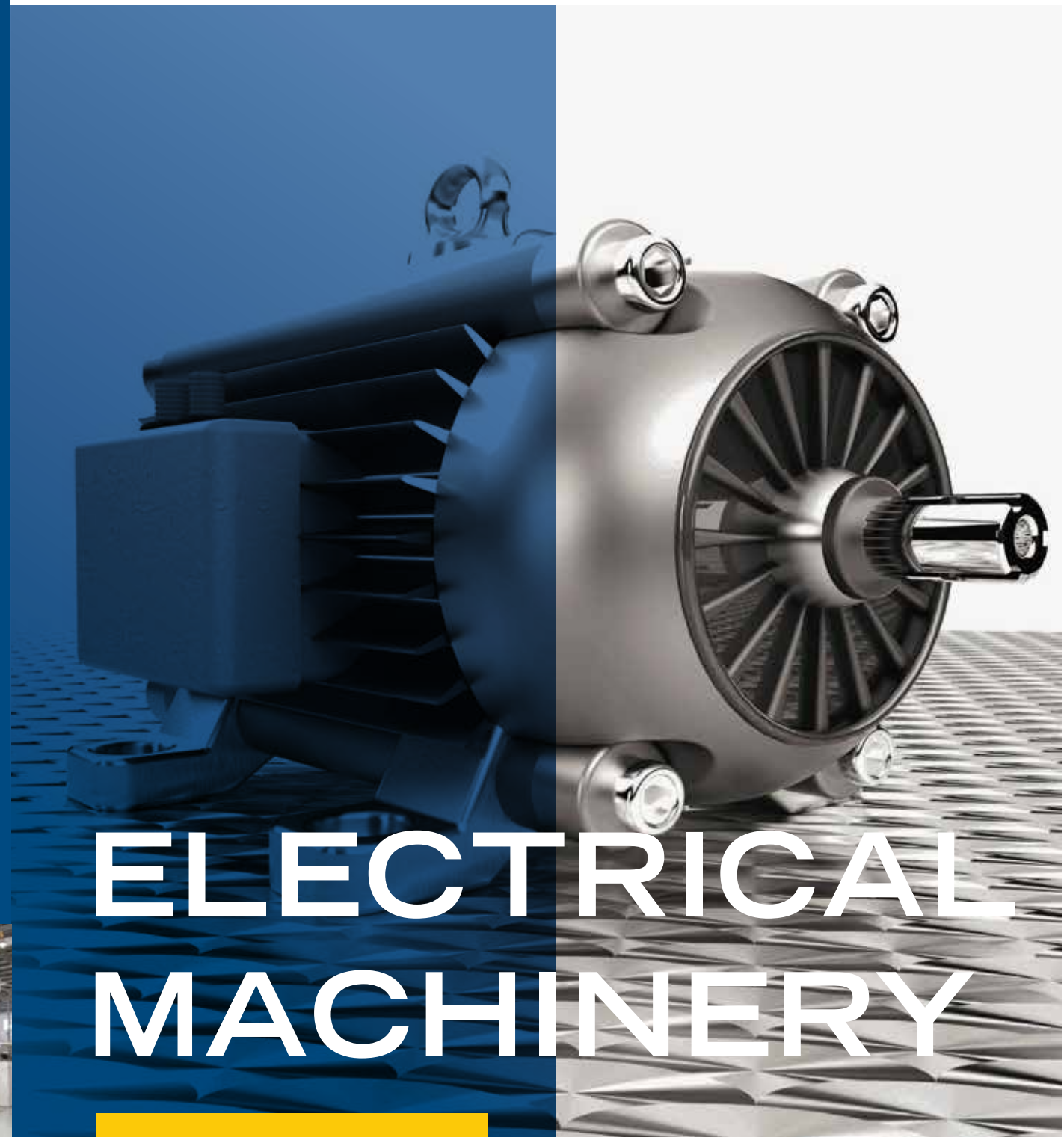


FERSA Jiaxing, China

Every care has been taken to ensure the accuracy of the information contained in this publication, but NKE accepts no liability due to errors or omissions. NKE reserves the right to change any product specifications. All rights reserved.
© NKE AUSTRIA GmbH.

Art.-Nr. 91886 GB 09.2018

NKE
B E A R I N G S



ELECTRICAL MACHINERY

FERSAGROUP

EXPERTS IN BEARING SOLUTIONS

NKE bearings are distributed through international representative offices and more than 240 distribution outlets in over 60 countries.



Professional service support
Equipped with experience and know-how, our technical and commercial teams work closely together with our customers. Our services include:

- / Application consultancy
- / Technical calculation
- / Certification support
- / Product development, design support
- / Training

NKE AUSTRIA GmbH is a premium bearing manufacturer with headquarters in Steyr, Austria. The company was founded in 1996 by a group of senior staff members of the former Steyr Wälzlager.

NKE manufactures both standard and special bearings for all industrial applications. Our core competences – engineering, product development, final processing of components, assembly, quality assurance, logistics, sales and marketing – are centralised in Steyr. The site is accredited with ISO 9001:2008 (design, development, manufacturing and distribution of bearings), ISO 14001:2004 and OHSAS 18001.

NKE AUSTRIA GmbH is a first class bearing manufacturer with HQ in Steyr, Austria.

We offer.

- / Standard bearings with a comprehensive stock range.
- / Tailor-made bearings for special requirements.
- / Technical service (e.g. consulting, documentation, training etc.).

Quality guaranteed at 100%.

All NKE bearings are manufactured with state-of-the-art equipment. They undergo stringent and documented quality inspection. By using advanced testing and measuring equipment and applying a rigorous quality policy, we can guarantee that every single batch of bearings delivered is of the highest quality standards.



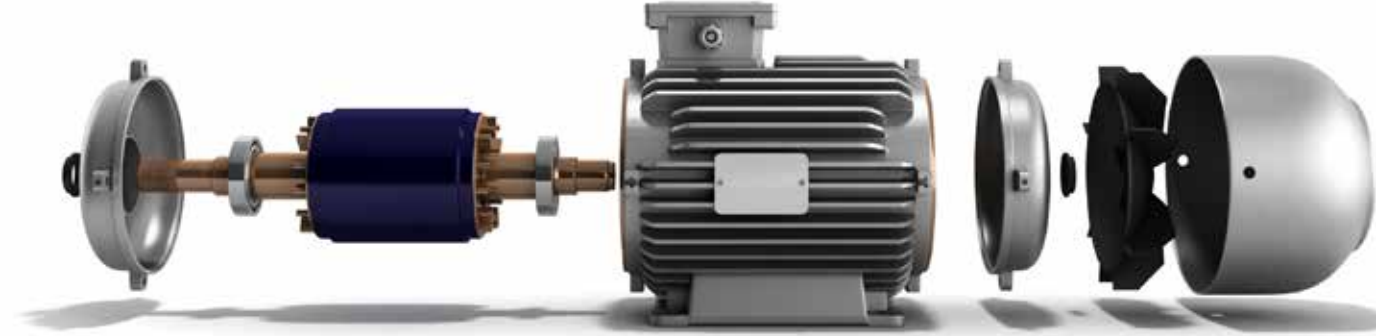
CONSTANT IMPROVEMENT IN OUR PRODUCTS

NKE Bearings for electrical motors and generators

Electric motors are the driving force behind most industries. Bearings for electric motors are required to operate with low noise, high reliability and speed capabilities, efficient coating to reduce the risk of electrical erosion (SQ77 bearings). The continued improvement of our designs ensure an optimal performance in the application.

NKE offers special solutions to protect the bearings against the electrical erosion used in the electrical machinery in order to improve reliability and increase the service life.

Our isolated bearings are identified by the suffix SQ77 and can replace, without any modification, the standard bearings in the machine. Applied with plasma technology, the insulation has a guaranteed breakdown resistance of at least 1000V AC or DC.



NKE Suffixes	SQ77	SQ77E		SQ1
Meaning	Outer ring coating	Inner ring coating		special specification for electrical motors
Diameter range [mm]	Outer diameter 90 ≤ D ≤ 500	Bore diameter 75 ≤ d ≤ 150	Bore diameter 150 ≤ d ≤ 315	complete CRB range
Bearing Type	DGBB, CRB Special types up to D=1000mm on request	DGBB CRB	DGBB CRB	CRB

NKE Bearings are especially suitable for electrical motors required to operate with low noise.

SQ77 - a special coating to isolate and protect bearings against electrical erosion.

AUSTRIAN QUALITY COMBINED WITH ADVANCED TECHNOLOGY

Bearings frequently used in electrical machinery:

Our bearing range for electrical machinery includes: DGBBs, CRBs and ACBBs. We also offer special solutions i.e CRBs for traction motors; DGBBs with electrical insulation layer (SQ77) for generators.

Cylindrical roller bearings (CRB)
commonly used as non-locating bearings on the drive side in medium- to large-sized motors

- / suitable for high radial loads and medium to high speeds
- / many design configurations
- / specific solution for demanding applications of CRBs in traction motors (SQ1)

Angular contact ball bearings (ACBB)
usually used as locating bearings in electric motors with high thrust loads or vertical axis

- / high axial load capacity
- / high speed ratings
- / single- or double-row, paired, various cage designs

Deep groove ball bearings (DGBB)
for locating and non-locating positions of small- to medium-sized motors and locating positions for larger motors

- / suitable for high speeds, moderate radial and axial loads
- / quiet and economical running
- / open or ready for use – pre-lubricated with shields/seals

Electrically insulated bearings (SQ77)

- / Deep groove ball and cylindrical roller bearings
- / Prevent damage caused by the passage of electric current
- / 100% interchangeable with standard bearings
- / Insulation coating (oxide ceramic) on outer or inner ring

Some example of our fast movers items

Designation	Boundary dimensions [mm]				Designation	Boundary dimensions [mm]			
	d	D	B	r ₁ , r ₂ min		d	D	B	r ₁ , r ₂ min
6212-M-C3-SQ77	60	110	22	1,5	6320-M-C3-SQ77	100	215	47	3
6213-M-C3-SQ77	65	120	23	1,5	6330-M-C3-SQ77	150	320	65	4
6214-M-C3-SQ77	70	125	24	1,5	6330-M-C3-SQ77E	150	320	65	4
6220-M-C3-SQ77	100	180	34	2,1	NU212-E-M6-C4-SQ1	60	110	22	
6312-M-C3-SQ77	60	130	31	2,1	NU213-E-M6-C4-SQ1	65	120	23	
6313-M-C3-SQ77	65	140	33	2,1	NU214-E-M6-C4-SQ1	70	125	24	
6314-M-C3-SQ77	70	150	35	2,1	NU313-E-M6-C3-SQ77	65	140	33	
6315-M-C3-SQ77	75	160	37	2,1	NU318-E-M6-C3-SQ77	90	190	43	
6316-M-C3-SQ77	80	170	39	2,1	NU326-E-M6-SQ1	130	280	58	
6318-M-C3-SQ77	90	190	43	3	NH320-E-M6-C4-SQ1	100	215	60	3
6319-M-C3-SQ77	95	200	45	3	NH320-E-M6-C4-SQ1-SQ77	100	215	60	3