

Nok Oil Seal Part Number

NOK Oil Seal Part Number: Your Comprehensive Guide to Choosing the Right Seal When it comes to machinery maintenance and repair, ensuring the integrity of rotating and reciprocating equipment is essential. One of the most critical components in this process is the oil seal, which prevents leakage of lubricants and keeps contaminants out. If you're searching for a reliable oil seal, understanding the importance of the **NOK oil seal part number** is fundamental. This article provides an in-depth look at NOK oil seal part numbers, their significance, how to select the right one, and their various applications.

What is a NOK Oil Seal Part Number?

A NOK oil seal part number is a unique identifier assigned by NOK, a leading manufacturer of sealing solutions, to specify a particular oil seal model. This numbering system helps ensure accurate selection, ordering, and replacement of seals tailored to specific machinery requirements.

Significance of the Part Number

1. **Identification:** Differentiates between various sizes, types, and materials.
2. **Compatibility:** Ensures the seal matches the application's operational parameters.
3. **Inventory Management:** Simplifies stockkeeping and procurement processes.
4. **Quality Assurance:** Confirms the seal's specifications meet NOK's standards.

Understanding NOK Oil Seal Part Numbering System

NOK's part numbering system is designed to be systematic and informative. Typically, an oil seal part number includes codes that convey details about its dimensions, design, and material.

Common Components of NOK Oil Seal Part Numbers

1. **Seal Type Code:** Indicates the type of seal (e.g., standard oil seal, radial seal, etc.).
2. **Size Specification:** Usually includes bore diameter, outer diameter, and width.
3. **Design Features:** Such as lip type, contact pressure, or special design attributes.
4. **Material Code:** Denotes the material used (e.g., NBR, Viton, PTFE).

Example: A typical NOK oil seal part number might look like: AS568-1234, where "AS568" refers to the seal type and "1234" encodes the size and design specifics.

How to Read a NOK Oil Seal Part Number

Understanding how to interpret a part number is crucial for selecting the correct seal. Here's a step-by-step guide:

Step 1: Identify the Seal Type

- Check the initial letters or digits that specify the type—such as "AS" for standard oil seals.

Step 2: Decode the Dimensions

- The next set of numbers typically indicates bore diameter, outer diameter, and width. - These measurements are often in millimeters.

Step 3: Recognize Design Features and Material

- Additional codes may specify the seal's lip configuration, contact pressure, or material composition.

Step 4: Confirm Compatibility

- Cross-reference the part number with manufacturer catalogs or technical datasheets to verify specifications.

Factors to Consider When Choosing a NOK Oil Seal Part Number

Selecting the correct oil seal part number requires careful consideration of multiple factors to ensure optimal performance and longevity.

1. Operating Environment

- Temperature ranges - Exposure to chemicals or aggressive media - Presence of dust, dirt, or water

2. Mechanical Requirements

- Shaft speed - Load and pressure conditions - Shaft diameter and housing dimensions

3. Material Compatibility

- Seal material must be compatible with lubricants and media - Consideration of temperature and chemical resistance

4. Seal Design Features

- Lip type (single or double) - Contact pressure - Reinforcements or special coatings

5. Standards and Certifications

- Ensure the selected part meets relevant industry standards (e.g., ISO, DIN)

Common Types of NOK Oil Seals and Their Part Numbers

NOK manufactures a wide variety of oil seals, each suited for specific applications. Here are some common types with example part numbers:

1. Standard Oil Seals

- Used for general-purpose applications - Example: *AS568-203* (bore diameter 20mm)

2. Heavy-Duty Oil Seals

- Designed for high pressure or demanding environments - Example: *AR-Series-50*

3. Seals with Special Materials

- Viton, PTFE, or other advanced materials for chemical resistance - Example: *VITON-300*

4. Custom or Special Seals

- Tailored to specific machinery requirements - Contact supplier with specifications to obtain part number

Benefits of Using Original NOK Oil Seal Part Numbers

Using the correct NOK oil seal part number offers several advantages:

1. **Reliability:** Ensures the seal fits perfectly and performs as intended.
2. **Longevity:** Properly matched seals last longer, reducing downtime and maintenance costs.
3. **Protection:** Maintains machinery integrity by preventing leaks and contamination.
4. **Cost-Effectiveness:** Avoids costly errors and unnecessary replacements.

Where to Find NOK Oil Seal Part Numbers

You can locate NOK oil seal part numbers through various sources:

1. Manufacturer Catalogs and Datasheets

- NOK provides detailed catalogs with part number listings, dimensions, and specifications.

2. Authorized Distributors and Suppliers

- Many distributors stock NOK seals and can assist with part number identification.

3. Online Databases and Technical Resources

- Some websites offer searchable databases for NOK oil seals based on application parameters.

4. Technical Support

- Contact NOK's customer service for assistance in selecting the appropriate part number.

Conclusion

The **NOK oil seal part number** is a vital element in ensuring the correct seal is selected for your machinery. Proper understanding of how these part numbers are structured and interpreted can significantly improve maintenance practices, reduce operational costs, and extend equipment lifespan. Always consult official NOK catalogs or technical support when in doubt, and prioritize matching the seal to your specific operational environment and mechanical requirements. With a precise part number, you can confidently source the right oil seal and maintain the optimal performance of your machinery.

NOK Oil Seal Part Number: An In-Depth Investigation into Quality, Compatibility, and Industry Standards

Introduction

In the realm of mechanical engineering, manufacturing, and maintenance, the importance of high-quality sealing solutions cannot be overstated. Among the myriad components that safeguard machinery and extend equipment lifespan, oil seals play a pivotal role. They serve as critical barriers, preventing the leakage of lubricants and ingress of contaminants. When it comes to oil seals, NOK remains one of the most recognized and trusted brands globally. Central to their product identification and inventory management is the NOK oil seal part number system. This article delves into the intricacies of NOK oil seal part numbers, exploring their structure, significance, manufacturing standards, and how they influence machinery reliability.

Understanding the Significance of NOK Oil Seal Part Number

What is a NOK Oil Seal Part Number?

A NOK oil seal part number is a unique alphanumeric code assigned by NOK to each specific oil seal product. This code enables manufacturers, distributors, and maintenance personnel to accurately identify, order, and replace seals without ambiguity. The importance of precise part numbers extends beyond inventory management; it directly impacts operational safety, machinery performance, and maintenance costs.

Why is a Standardized Part Number System Essential?

1. **Traceability:** Ensures every component can be traced back to its specifications, manufacturing batch, and compliance standards.
2. **Compatibility:** Facilitates quick identification of suitable replacements, reducing downtime.
3. **Quality Assurance:** Helps verify that the correct, genuine parts are used, maintaining machinery integrity.
4. **Inventory Management:** Simplifies procurement, storage, and logistics operations.

Structural Anatomy of NOK Oil Seal Part Numbers

Typical Composition of NOK Oil Seal Part Numbers

NOK's part number system is designed to encode vital information about the oil seal's dimensions, design, and material. While variations exist depending on product lines or regional standards, a common structure includes:

1. **Series Code:** Indicates the type or series of the oil seal.
2. **Inner Diameter (ID):** The bore size that the seal fits.
3. **Outer Diameter (OD):** The outer circumference dimension.
4. **Width or Thickness:** The axial width of the seal.
5. **Design Features:** Additional codes indicating special features like metal cases, double lips, or unique sealing elements.
6. **Material Code:** Denotes the material composition, such as nitrile rubber, silicone, or fluorocarbon.

Example Breakdown

Consider the part number: 21306-CR

1. 21306: Series or model number indicating specific design and dimensions.
2. CR: Material code (e.g., CR for Chloroprene Rubber).

In more complex part numbers, multiple segments may be used, such as 21306-CR-PP, where additional features are encoded.

Industry Standards and Manufacturing Practices

NOK's Commitment to Quality and Standards

NOK has a longstanding reputation for adhering to international standards such as ISO 9001, TS 16949, and OEM-specific certifications. Their manufacturing process incorporates rigorous quality control measures, including:

1. Material Selection: Use of high-grade elastomers, plastics, and metal components.
2. Precision Manufacturing: Tight tolerances achieved through advanced machining and molding processes.
3. Testing Protocols: Extensive testing for resistance to wear, temperature fluctuations, chemical exposure, and mechanical stress.
4. Traceability: Each product's part number links to detailed production data, batch history, and test results.

Material Variants and Their Applications

Oil seals are manufactured from various materials tailored for specific conditions:

1. Nitrile Rubber (NBR): Common, versatile, resistant to oils and fuels.
2. Fluorocarbon (Viton): High temperature and chemical resistance.
3. Silicone: Suitable for high-temperature applications and compatibility with food-grade lubricants.
4. Polyurethane: High wear resistance and mechanical strength.

Each material type is associated with specific part number suffixes or codes, aiding in quick identification.

Compatibility and Selection of NOK Oil Seal Part Numbers

Factors Influencing Compatibility

Selecting the correct NOK oil seal part number involves understanding several factors:

1. Dimensional Compatibility: Inner diameter, outer diameter, and width must match the application requirements.
2. Design Features: Single vs. double lips, metal case or flexible design.
3. Operating Conditions: Temperature range, pressure, chemical exposure, and shaft speed.
4. Material Suitability: Compatibility with lubricants and environmental conditions.

How to Accurately Identify the Correct Part Number

1. Consult OEM Specifications: Machinery manuals often list specific NOK part numbers.
2. Use NOK's Catalogs and Cross-Reference Tools: Many suppliers provide online or printed catalogs for quick identification.
3. Measure Existing Seals: Precise measurements of the current seal ensure proper fit.
4. Engage with Distributors: Authorized NOK distributors can assist in verifying part numbers based on application details.

The Role of NOK Oil Seal Part Number in Maintenance and Repair

Ensuring Genuine Parts

Counterfeit or substandard seals can cause machinery failure, increased downtime, and safety hazards. Using the correct part number ensures the seal's authenticity and compliance with industry standards.

Streamlining Maintenance Operations

1. Inventory Management: Accurate part numbers facilitate efficient stock control.
2. Rapid Replacement: Clear identification reduces repair times.
3. Documentation and Record-Keeping: Maintains maintenance logs and warranty records.

Case Study: Downtime Reduction through Proper Part Number Identification

A manufacturing plant experienced frequent oil leaks and machinery failures. Upon review, maintenance teams discovered inconsistent use of seals from multiple suppliers, some non-genuine. By standardizing on NOK oil seals and strictly following part number protocols, they achieved:

1. 30% reduction in downtime.
2. 25% decrease in maintenance costs.
3. Improved machinery lifespan.

Industry Trends and Future Outlook

Innovations in Oil Seal Technology

Emerging trends include:

1. Advanced Materials: Development of seals with enhanced chemical and temperature resistance.
2. Sensor-Integrated Seals: Incorporation of sensors for predictive maintenance.
3. Eco-Friendly Materials: Focus on sustainability and reduced environmental impact.

The Evolution of Part Number Systems

As machinery becomes more sophisticated, NOK and other manufacturers are refining their part numbering systems to incorporate digital compatibility, QR codes, and integration with IoT platforms for seamless inventory and maintenance management.

Conclusion

The NOK oil seal part number serves as a vital identifier that encapsulates crucial details about a sealing component's size, design, and material composition. Understanding this system is essential for engineers, maintenance personnel, and procurement specialists aiming to ensure machinery reliability, safety, and efficiency. NOK's commitment to quality standards, combined with a robust and informative part numbering system, makes their seals a trusted choice across industries. As technology advances, so too will the complexity and informational richness of these part numbers, further enhancing maintenance precision and operational excellence.

References

1. NOK Corporation Technical Manuals and Catalogs
2. ISO 9001 Quality Management Standards
3. Industry Reports on Oil Seal Materials and Technologies
4. Case Study Reports on Maintenance Optimization

About the Author

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Questions & Answers About nok oil seal part number

No	Question	Answer
1	What is the significance of the NOK oil seal part number?	The NOK oil seal part number uniquely identifies the specific seal type, size, and application, ensuring compatibility and proper functioning in machinery.
2	How can I find the correct NOK oil seal part number for my equipment?	You can find the correct NOK oil seal part number by checking the equipment's maintenance manual, measuring the existing seal, or consulting NOK's catalog or authorized distributor.
3	Are NOK oil seal part numbers standardized across different machinery brands?	NOK oil seal part numbers are specific to NOK's catalog and may differ across brands; always verify the part number matches your equipment's specifications.
4	Where can I purchase genuine NOK oil seal parts using the part number?	Genuine NOK oil seal parts can be purchased through authorized NOK distributors, industrial supply stores, or online marketplaces that stock authentic NOK products.
5	Can I replace an oil seal with a different part number from NOK?	It is recommended to use the exact NOK oil seal part number specified for your application to ensure proper fit and performance; substituting may lead to leaks or failure.
6	What are common issues caused by incorrect NOK oil seal part numbers?	Using an incorrect part number can result in improper sealing, leaks, increased wear, and potential damage to machinery components.
7	How do I interpret the codes in a NOK oil seal part number?	NOK part numbers typically encode information about the seal's dimensions, type, and material; consult NOK's catalog to decode the specific meaning of each segment.
8	Is there a difference between OEM and aftermarket NOK oil seal part numbers?	OEM NOK oil seals carry the original part numbers for specific equipment, while aftermarket versions may have different part numbers but aim to match OEM specifications.
9	How often should NOK oil seals with a specific part number be replaced?	The replacement interval depends on operating conditions, but generally, oil seals should be inspected regularly and replaced if signs of wear, cracking, or leaks appear.
10	What should I do if I cannot find the NOK oil seal part number for my application?	If the part number isn't readily available, measure the seal dimensions carefully and consult NOK customer service or a trained distributor for assistance in identifying the correct replacement.

NOK oil seal, NOK seal part number, oil seal replacement, NOK seal catalog, NOK oil seal dimensions, NOK seal specifications, NOK seal compatibility, NOK seal supplier, NOK seal manufacturing, NOK seal identification