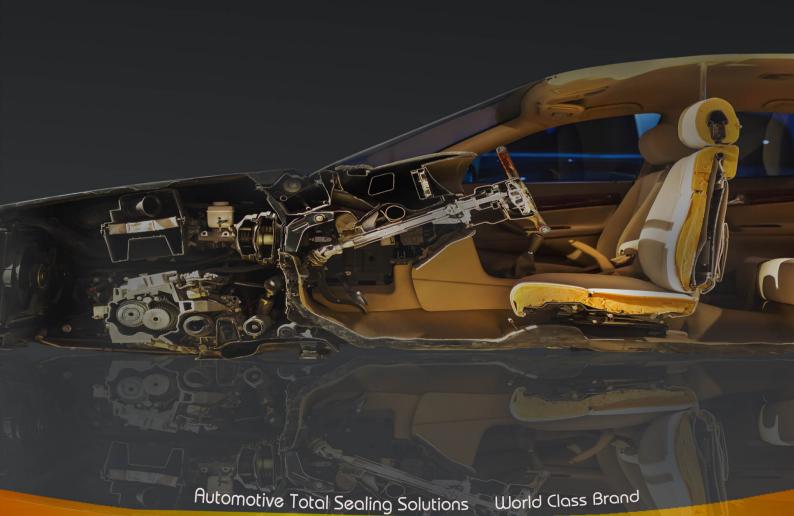


## NRK Product Information

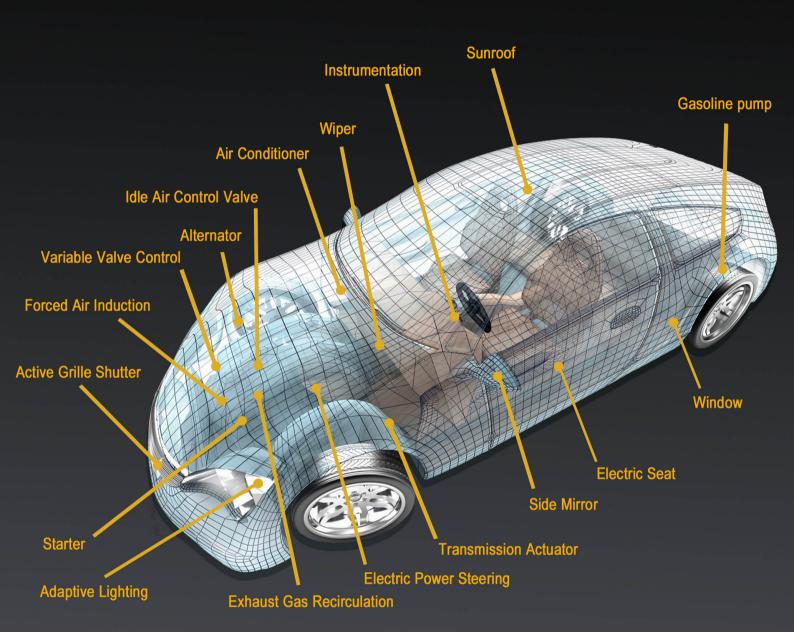
# MAK Sealing Solutions for Automotive Motors



## **MOTORS ARE EVERYWHERE!**

## CAN YOU IMAGINE ...

How many motors there are in one vehicle?



To have a safe and comfortable driving experience, and to reduce fuel consumption and  $\mathrm{CO}_2$ , the development of vehicles trend to the intelligentization (innovation), motorization (automation) and energy-saving thus, the demands for automotive motors used in cars are increasing dramatically.

Because of operating in the high temperature environment, automotive motors are required in high quality and efficiency. NAK sealing products are designed in high quality to suit automotive applications.



NAK sealing solutions for automotive motors include rotary seal to prevent the dust incursion, and the O-Ring is for static sealing. Both of them increase the function for automotive motors and provide high efficiency for cars.



#### **MATERIALS**

for various materials, such as NBR, HNBR and FKM.



#### **ADVANTAGES**

- Special corrugated design of O.D.
- Suitable to apply to housing materials subject to large thermal expansion, i.e. plastic housing.
- 角 High deflection sealing lip to have a low torque.



#### HOUSING AND MACHINING CRITERIA

Shaft:

Tolerance: JIS B0401 h9.

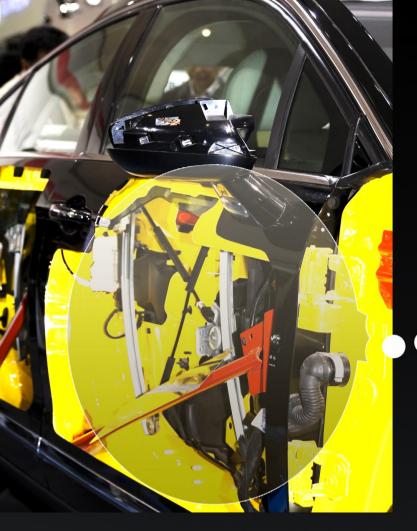
角 Roughness: Ra = 0.2~0.8 μm, Rz = 1~5 μm,

Bore:

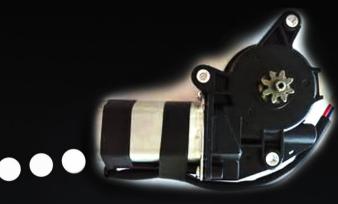
Tolerance: JIS B0401 H8.

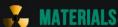
Roughness: Ra =  $1.6 \sim 3.75 \mu m$ .





## **O-RINGS**





📒 It is used for various materials such as NBR, HNBR, ACM, AEM, VMQ, FKM and etc.

### **ADVANTAGES**

- 角 Simple groove design for assembly
- 🧂 Save space and weight
- 角 Easy to install





#### 🛼 HOUSING AND MACHINING CRITERIA

- 🖯 Applicable to a wide range of sealing solutions, i.e., static, dynamic, single or double acting.
- For static sealing, it seals over an exceptionally wide range of pressures, temperatures, and tolerances.
- Wide compound choices for compatibility with most fluids



▲ If you need more information, please contant us at service@mail.nak.com.tw

## **NAK SEALING SOLUTIONS FOR AUTOMOTIVE MOTORS SEALS**



- NAK products are not intended to be used, installed or applied in or on any aerospace related instruments and/or equipment. Any such use, installation, or application is prohibited and shall void all warranties

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  2.1 are modified or tampered with;
  2.2 are misused, abused or misapplied;
  2.3 are used in a critical environment or specific equipment without NAK's prior written consent;
  2.4 are not used in accordance with the printed user instruction materials; or
  2.5 are damaged due to natural deterioration, decomposition or transformation of chemical structure.
  The products may be applied in critical environment or specific equipment only upon official confirmation of the sample by NAK's technical personnel and the passing of tests conducted by buyer.

