NSK Linear Guide™
Roller Guide Equipped with V1 Seal

Newly developed, highly dustproof V1 seals help extend the service life under an environment with a high level of foreign matter.

Features

1. Maintain high dustproof performance for a long period
   Equipped with V1 seals with an enhanced abrasion resistance, this new linear guide will maintain dustproof performance for a long period, thereby contributing to the long service life of the machine tool.

2. High-rigidity linear guides optimal to machine tools
   Developed based on the RA Series roller guides with an excellent track record in applications to machine tools.

3. "NSK K1™" lubrication unit
   Outstanding lubrication effects by NSK K1 further improves the durability.

4. Rail mounting hole caps and a rail cover
   These parts eliminate building up of foreign matter in and around the rail mounting holes, thereby preventing foreign matter from entering into the roller slide. Select either the rail mounting hole caps or the rail cover.
# NSK Linear Guide™ Roller Guide Equipped with V1 Seal

## NSK K™ Lubrication Unit

Porous resin

Containing a large amount of lubricating oil

Made of porous synthetic resin containing a large amount of lubricating oil. When moved through contact with the raceway surface, it supplies fresh lubricating oil.

## Rail Cover (Optional)

Covers the top surface of the rail and prevents foreign matter from entering in rail mounting bolt holes.

## Rail Mounting Hole Caps

These caps prevent foreign matter from building up inside the rail mounting holes.

## V1 Seal

Lip made from a new material

Highly abrasion-resistant material used for seal lip

V1 Seal made of new materials and in a new shape for better abrasion resistance prevents foreign matter getting into the roller slide for a long period.

### Durability Test under Extreme Conditions - No Lubrication

With this new material, even if lubrication is poor, damage such as roughening of surfaces will not occur.

**Test condition**

- Test sample: RA35
- Operation without lubrication on the seal
- Feed speed: 30 m/min

### Applicable Models

RA35, RA45 and RA55

### Dimensions for Roller Slide with V1 Seal

<table>
<thead>
<tr>
<th>Model</th>
<th>Roller slide length L</th>
<th>Thickness of V1 seal</th>
<th>Thickness of NSK K1</th>
</tr>
</thead>
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<td></td>
<td>Equipped with standard seal</td>
<td>Equipped with V1 seal</td>
<td>Equipped with V1 seal and NSK K1</td>
</tr>
<tr>
<td>RA35</td>
<td>AN, AL, EM 123.8</td>
<td>127.8</td>
<td>140.8</td>
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<td></td>
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<td>RA55</td>
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<tr>
<td></td>
<td>BN, BL, GM 234</td>
<td>239.2</td>
<td>253.2</td>
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</table>

⚠️ Since the sealing property (resistance to foreign matter) is affected by usage or the lubrication environment, please conduct an evaluation test for your particular application.

⚠️ Observe the following precautions to maintain the long-term efficiency of the performance seals:

- Permissible temperature range: 50°C, Maximum instantaneous peak temperature: 80°C
- Chemical precautions: Never leave the linear guide near grease-removing organic solvents such as hexane or thinner.
- Never immerse the linear guide in kerosene or rust preventive oils which contain kerosene.

For more information about NSK products, please contact: [www.nsk.com](http://www.nsk.com)

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NSK used environmentally friendly paper and printing methods for this publication.

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